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REFLEXES IN EARLY CHILDHOOD: THEIR DEVELOPMENT, VARIABILITY, EVANESCENCE, INHIBITION, AND RELATION TO INSTINCTS

By C. W. VALENTINE

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IN the study of the development of mind in early childhood it is impossible to ignore the reflexes: and in observing these we find much that is suggestive for an understanding of the general nature and growth of mind; for, as I shall try to show, they are more inextricably mingled with other functions and with the general condition of the individual than is commonly supposed.

Further, the more precise study of the reflexes in infancy, the fixing of the usual age of the first appearance of signs of definite stages of development, and the exemplifying of individual differences in such matters, may lead to an earlier and more exact diagnosis of mental capacity and defect, and to more reliable prophecies of further probable development, based on the first few months of life.

For in view of existing evidence suggesting that retardation even at the age of 4 or 6 months may mean proportional retardation at a few years of age¹, it is possible that prognosis of some value may be made even on the basis of observations made at 1 or 2 months, and that the observation of the reflexes may be an important element in such prognosis, and may indeed form the beginnings of a kind of Binet Scale of tests, applicable from the first few months of life.

If however this is to be done we cannot rest content with the cross-section method of study such as that used by J. B. Watson and Gesell, in which a group of infants at a given age are tested. This method has its values: and it will be essential if we are to make wide generalizations. But it cannot, at this stage, replace the daily, almost hourly, observation and repeated testing, over a continuous period of months, of the same child in normal home surroundings. For as we shall see, even the reflexes which might be thought the most stable of phenomena are so variable, so dependent on general conditions, that a brief examination of a child, unsupported by further observations under varying conditions, may be misleading.

In my own observations, however, the definite fixing of dates and stages of development has been of less interest than general psychological significance. As the merest details may be of importance here, I must ask the reader who has no special point of interest to pardon an amount of detailed observation which, apart from any inferences here suggested, may be useful as raw material to researchers on various special problems in genetic psychology.

My own main purpose in this paper, in addition to recording observed facts and experimental results, will be to illustrate and emphasize the fact that many, if not all, of the so-called reflexes, come at some stage of mental development into relation with instinctive and voluntary behaviour. And that the difficulty of deciding when and how far emotional and voluntary influences enter makes it exceedingly difficult, at least at some stages of development, to draw any hard and fast line between reflex and instinctive or voluntary action—so intact and so complex a mechanism is man.

In this paper, unless otherwise specified, my own observations relate to my boy *B*, who was a healthy energetic child, 10 lbs. at birth. I have

¹ See especially the important pioneer work of Dr Arnold Gesell, *The Mental Growth of the Pre-School Child* (Macmillan, New York, 1925). Dr Gesell refers to the "incontestable clinical observation that one month of constitutional retardation in early infancy may be predictive of a whole year of retardation after the first birthday."

indicated my three boys by the letters *A*, *B*, and *C*, and my two girls by *X* and *Y*, alphabetical order not to be taken as denoting seniority. *A* was 8 lbs. at birth; a more placid baby than *B*. *A* was very healthy till the age of 11 months, when an illness of several months affected his development for some time. *E* stands for their mother. In the case of *B* there was constant observation by myself and systematic testing from the 1st day: usually some observation during each of his waking periods and practically every day for the first 12 months or so, supplemented by constant enquiry of his mother who attended to him almost entirely for that period. The same applied to a less extent to *Y*, whilst on *A* and especially *X*, though observation was fairly constant, testing was much less frequent.

THE DEVELOPMENT OF THE EYE-BLINK REFLEX.

It may seem strange to speak of the development of a reflex. The essential and invariable marks of a reflex are usually thought to be the fixity and inevitability of its occurrence in response to a definite stimulus; some of our leading psychologists have spoken of its psychological isolation, its independence of any complication with other functions of the organism.

The work of Sherrington has shown the difficulty of maintaining such a view. The "simple reflex," he states, is a "convenient but artificial abstraction." The nervous system functions as a whole¹. Now Sherrington's position was based mainly on experiments with animals; but the study of some of the early appearances of reflexes in the infant impresses one still further with the complication and interdependence of supposed definite reflexes with other functions, and with the possibility of the development and inhibition of reflexes.

I select first the eye-blinking reflex in response to the rapid approach of an object near the eyes: it illustrates especially the possibilities of the extension and complication of the sphere of appropriate stimuli of a reflex.

Very different dates are given by different observers for the first appearance of this reflex. J. B. Watson says that it "does not appear until about the 100th day²." A. Gesell puts it down as a test for a normal 4 month old development³.

¹ *Integrative Action of the Nervous System*, p. 114.

² *Psychology from the Standpoint of a Behaviorist*, 2nd edition, p. 253.

³ *Op. cit.* p. 367.

So careful an observer as G. V. N. Dearborn records the reflex as being observed in his daughter for the first time on the 124th day. He writes: "the winking-reflex to an unexpected object suddenly brought near the eyes is present to-day in L. as in adults, although the reaction is obviously slower and not so perfect. This wink-reflex seems relatively late in L. Major's 'R' *e.g.* had it well developed on day 49. It seems proper to suspect that a better knowledge of inhibition would explain many of these conditions for it is hard to suppose that so basal a reflex should be so variable in the period of its perfecting¹."

Miss Shinn writes of her niece: "The first time that she winked at having a head suddenly thrust close to her eyes was on the 56th day, when the wink followed slowly but regularly, six times without a failure. It had been tried in vain almost daily for weeks before²."

Preyer writes: "I put my hand suddenly near the face of the child as he lay quiet with open eyes, without the least reaction on his part, on the 6th, 8th, 11th, 12th, 22nd, 25th, 50th, and 55th days. On the 57th and 58th days I noticed that winking made its appearance for the first time, occurring when I put my head quickly near the child's face; but, on repeating the experiment several times, both eyes remained open. On the 60th day, the quick simultaneous shutting and opening of both eyes in case of fright at a quick approach to the face (just as in case of a sudden loud sound) is already the rule³."

Major made similar tests on days 5, 13, 19, 26, 32 and 38 but even on day 49 to which Dearborn refers, Major only records that "both eyes blink feebly, the right more than the left⁴."

My first test with my boy *B* on day 10 resulted in the record "No blinking reflex when book rapidly approached to within 2 inches of his eyes." On the same day, however, "Blowing on the face caused blinking of the eyes, four times."

Again, D. 15⁵: "Eyes blink when face blown on, but not at sudden approach of hand."

Here the sensation of air blowing on the eye produces the same effect as an actual touch on the eyelid does at the same age. Preyer records that a touch of the lashes produces an immediate closing of the

¹ *Moto-Sensory Development*, p. 59.

² *Notes on the Development of a Child*, p. 13. (Univ. of California's Publications in Education, vol. I.)

³ *The Senses and the Will*, p. 26.

⁴ *First Steps in Mental Growth*, p. 344.

⁵ Henceforth the letter D. will be used for day.

lid during 'this period'—*i.e.* the days 5–55 mentioned above. On D. 16 I found with *B* that "both eyes blink when upper lids are touched, near the centre, but no blink follows when lower lid is touched fairly strongly with the little finger, four times."

On D. 17: "Blinking got by every touch of an eyelash either on upper or lower lids of both eyes": (repeated D. 18) "But still not with sudden approach of hand."

On D. 18: "When asleep blowing on face caused blinking (*i.e.* tighter shutting of lids) three or four times without waking." So with *A* on D. 21, again in *B* on D. 22, and in *Y* on D. 16, with no sign of waking.

There is then in my records no relevant note till D. 64 when I found in *B* "no sign of eyelid reflex to rapidly approaching hand, unless a draught is caused." I used to test the reflex sometimes by bringing my hand forward edgeways towards *B*'s face, and sometimes broadside on; similarly I used at times a book broadways or edgeways, my view being that the latter would cause no appreciable movement of air. A similar distinction may have existed between head movement and hand. For example, with *A* (at D. 63) the "sudden approach of my head towards his eyes caused him to make a big start (throwing up his arms) as well as the eye-wink; the third time only the eye-wink followed. Yet a hand repeatedly waved quite close to the eyelid did not cause a wink even when he was obviously fixating the hand before its descent¹."

The regular reflex was still not present on D. 67 but on D. 69 it occurred "sometimes partial and sometimes complete, no doubt of it, though once or twice it did not happen. I approached hand sideways or with open spread fingers to avoid causing a draught of air." Later in the day I noted "failed to get winking reflex with hand movement, only with head: is it still a question of draught?"

So with *Y*.

D. 63: "Approached letter case rapidly sideways to her eyes—no blink. Approached it rapidly broadways, with movement to cause draught of air—blink."

The extreme instability of the reflex is shown at this period: thus; on D. 70: "wink reflex this morning with this note book (quarto) but only first time: not repeated two or three times." Yet on D. 71 the

¹ It is possible, however, that the former result was due to a greater start or shock produced by a larger object like the head approaching. It may be noted that *A*'s wink-reflex occurred on D. 44, as result of his brother banging a wooden brick on the floor, though this failed to produce it on D. 59.

reflex was obtained, the hand being used with open fingers, "five or six times following."

It is difficult, of course, to be certain that such variability is not at least partly due to variation in the strength of the stimulus, *e.g.* the strength of the air current caused. But I myself was convinced that it was not due merely to this; and some observations seem to make it clear; the last mentioned, for example, when the blink was obtained with fingers open, and the next, when the jovial mood *B* was in seemed to affect his reactions: D. 76: "Frequently the winking reflex fails to-day, both with head and hand: he just chuckles and enjoys it when it is the head that is moved towards him"; and a similar failure is recorded with half-a-dozen tests, head and fist, on D. 84. On D. 85 there is "wink-reflex to-day with head but not with fist." On D. 87: "wink-reflex takes place but not always with hand. Sometimes it does first time and then not succeeding three or four times." Yet D. 89: "Winking reflex four times in succession with head or pointed fist."

These variations in reactions at the same period make the reflex unreliable as a test of development, unless it is repeated under various conditions.

A further stage was reached by *B* on D. 113 when "blinking reflex occurs now to fairly slow approach of head or hands, a very slow and slight approach causes partial closing of lids."

By this time the reflex response seems fairly definitely associated with sight as well as touch sensations. No doubt the development of sight is itself an important factor. At these early stages it is possible that, if the reflex is to take place, the child must be looking directly at the object before it approaches his face, though this is not necessary in the adult. At least I noted with *A* on D. 66: "when he was fixating my face I rapidly approached note book to his eyes: no wink (three times). But when I moved my face away and waited till he fixated the book and approached the book as before a wink followed each time. Yet previously he did not wink at rapid approach of my face though he seemed to be looking at it." Similarly (*A* on D. 77): "Winking reflex occurs with cushion when he is looking at it, or almost directly at it. If eyes averted somewhat reflex does not occur."

Miss Shinn points out that several observers noted the winking reflex about the same time as voluntary accommodation of the eye; and suggests that the reflex may be due to "the power of following by accommodation the approach of a body toward the eyes, and perceiving

with some distinctness its sudden expansion across the field of vision¹."

The difficulty in accepting this, however, is that the apparent sudden expansion is no greater because of accommodation: while lack of convergence may actually make the expansion appear even greater. Of course accommodation is important for judging distance, but it is hardly likely that anything in the nature of a judgment of changing distances is involved at this early stage. The definite gazing at an object and following it with the eyes appears long before the establishment of the reflex, indeed before the 1st month is over.

It seems to me more probable that a response originally confined to actual touch of the eyes, but occurring also when a movement of air produces a touch sensation, becomes gradually transferred to the sight of an approaching object as the approach of an object becomes associated with sensations caused by air movement, the development of accommodation perhaps helping towards a co-ordination by building up delicate sensitivity to variations of distance. In the course of dressing and undressing, being swung in the arms of mother or nurse and so forth, there must be hundreds of occasions in the first few weeks of life in which a baby experiences such touch sensations due to air movements, synchronously with the approach of bodies to his eyes.

If such an extension or transference is the mode of development of the reflex then this wink-reflex, in its final form, becomes identical with the 'conditioned reflex' as that term is used by some present-day psychologists—a not very exact description of the phenomenon, as it seems to me.

It will be seen that, if my surmise is correct, the *manner* of testing the reflex, during the transition period, becomes of great importance.

Another explanation of the development of the eye-blink at approaching objects has been suggested to me—namely that it is connected with the maturing of fear together with the fuller 'meaning' of the approach to the eyes of external objects. As to this I would point out that the eye-blink in response to a loud and startling noise, the first stimulant of (apparent) fear, occurs, as we shall see, as early as the 40th day, or even earlier; while the fuller 'meaning' of the approach

¹ More recently Dr A. Gesell, who found that between 65 per cent. and 84 per cent. of the 50 babies tested at 4 months blinked at the approach of a hand, but less than 50 per cent. at the sudden approach of a pencil, suggests that the latter represents a somewhat more advanced neuro-muscular organization. See *The Mental Growth of the Pre-School Child*, p. 103.

of an external object to the eyes is likely to be brought about by nothing but the association of sight with touch, as I have suggested above.

The possibility of the extension of the effective stimulus of a reflex by association is more definitely shown by some later tests on *A*, *B*, and *Y* in reference to the eye-blink in response to loud sounds, which we will now consider.

THE EYE-BLINK IN RESPONSE TO SOUNDS.

The blinking of the eyes when a loud sudden sound occurs is a familiar phenomenon. It seems part of a general reaction to sudden shock. Darwin noted it in his child during the first fortnight in response to a sudden sound. Preyer noted winking at a sudden noise on the 25th day. With *Y* I noted on D. 42: "A loud door bang, while she was nursing, produced eye-blink. Tested twice"; and it no doubt occurred frequently in the others in reactions suggesting fear or shock of some kind, when *e.g.* the head was thrown back and the body stiffened, without its being noted among the more marked bodily reactions.

On *Y* I observed

D. 61: "As she lay on *E*'s knee, resting near end of evening feed, I banged my note-book together out of her sight: no blink. Again: caused blink. Third time: half-blink. Loud bang of door caused blink, in midst of contented coos which were not interrupted, one following immediately on blink."

On D. 114: "I clapped my hands when *B* was looking at his mother: no blink. When I took her place so that he could see my hands he did blink. (I do not know that they were louder claps.) He also laughed aloud. This was repeated several times." [If the sudden start and eye blink was accompanied by something in the nature of start or shock, as is usually supposed, then the quick following of laughter as in the note on *B* above, shows that the shock is very slight, or is suggestive of the close association of exhilaration with a slight fear stimulus.]

Later in the day (D. 114) "I repeated experiments with claps: several very loud claps, no effect: when I attracted his attention so that he could see my hands (though 3 feet off and hands moving not towards him but at right angles to his line of vision) then again he blinked several times. I find I can get the blink by rapid clapping motion, without the sound, but it is not so decided (often only half-blink) as when there is loud sound."

It is of course difficult to be certain that there are not variations in the loudness of the handclap in such tests as these. With this danger

definitely in mind I retested *Y* on D. 105 as she lay on her mother's knee resting in an interval of feeding.

D. 105: Hand clap out of sight	...	...	...	blink
Do.	...	...	...	no blink
Hand clap in sight	...	...	...	blink
Hand clap out of sight (taking care to				
make it louder	...	...	...	no blink
Do.	...	...	...	no blink

This curious phenomenon of the blinking in response to seen claps, when claps only heard were not blinked at, seems only explicable to me on the assumption that this reflex sometimes works as the result of a summation of two stimuli when it may not in response to one alone. It is to be remarked that this phenomenon was only noticed at a period when the eye-blink response to an object seen approaching had developed.

The next record on *B* is D. 164 when "*pretended* hand clap produced blinking, three or four times; then did not. Made hand claps where he could not see, and blinks recurred each time. Then claps renewed in his sight and blinks occurred. Now pretended claps produced blinks again two or three times and then failed again: renewed claps in sight, then again pretended ones, produced blinks, but for a shorter time—only once or twice, then failed."

This tendency remained at least as late as D. 200, the last note, when "he still blinks at a seen clap and at first pretended clap, but not at second or third. He still blinks at a clap noise when hands not seen."

Here again we seem to have definite evidence of a transference, in the course of the development in early infancy, of the reflex response to some stimulus (seen movement usually associated with sound of clap) associated with the primary essential 'appropriate' stimulus, viz. the loud sound of a clap. It may be compared with the fact discovered by Pavlov, that when a horn was repeatedly blown at the same time as an acid was placed in the mouth of a dog the increased flow of saliva due to the acid could eventually be obtained by the blowing of the horn alone, when it had become associated with the acid¹. And further, it affords an example of 'co-ordination' by a common path to use Sherrington's phrase. "The ramifications," he writes, "of the central neurones attached to these (distance) receptors are so extensive and the reactions they excite are so far spreading in the organism that their

¹ Pavlov, *Scientific Investigation of the Psychical Faculties or Processes in Animals*, Huxley Lecture, 1906.

association with the reactions and central mechanisms of other receptors is especially frequent and wide¹."

THE INSTABILITY OF A REFLEX.

The variability of the eye-blink reflex in response to sound was so marked, and so great was the difficulty of making certain that it was not due to varying strength of stimuli that I carried out with Y a rather long series of experiments with a standardized sound stimulus. This was produced by dropping a stone weighing about 1 lb. on to a small tin tray turned upside down on the floor at a distance of 6 feet from the infant. The stone was dropped at first from a height of 1 foot, which was then raised to 2, then to 3 feet, and finally to 4 feet. The experiments were only done when the child was lying happy and contented on her mother's knee, usually resting in the middle of a meal, or at the end. Except in earlier cases specially indicated, the intervals between the bangs was as on D. 115 timed at about 15 seconds and on and after D. 116 at about 20 seconds, the time required for me to turn and write down the result of the previous bang, pick up the stone and measure the correct height again. For the first 3 days the intervals were about 5 to 7 seconds. I lengthened the intervals to lessen the chance of fatigue influences.

In the table below the score 1 means a complete blink, $\frac{1}{2}$ means a slight blink but not a complete shutting of the eyes. Any special occurrence is noted below.

This experiment clearly illustrates the extreme instability of the blink reflex at this stage. It was certainly suggested at one sitting that some other happening beside the sound, as for example the diversion of attention by the face of a visitor, might inhibit the reflex: but on many occasions no such variations in surroundings occurred: the reflex, indeed, seemed to appear or not in a most arbitrary fashion. Table I shows more clearly than we have done so far, how cautious we must be in interpreting the absence of a reflex response on one or two given occasions as showing that the requisite mechanism has not yet matured. There was no response to any of the twelve tests in the morning of D. 195, but the reflex revealed itself again in the evening.

¹ *Op. cit.* p. 351.

Table I. *Showing Variability of Eye-blink response to loud sound.*

Day	111	112	114	115	116	117	118	119	120	131	195 a.m.	195 p.m.	196
Length of stone drop (feet)	1	2	3	3	3	3	3	3	3	3	3	4	4
Time intervals (minimum)	5"	5"	5"	15"	15"	15"	15"	15"	15"	15"	15"	15"	15"
Results of tests	1	0	0	0	1	1	1	1 ^e	1	1	0	0	0
	2	$\frac{1}{2}$	0	1	0	0	1	0	1	$\frac{1}{2}$ ^f	0	0	1
	3	0	1	0	0	1	1	$\frac{1}{2}$	1	0	1	0	1
	4	0	0	0	0	1	1	1	0	$\frac{1}{2}$	1	0	1
	5	0	0	0	1	1	1	1	0	1	1	0	0 ^b
	6	0	1	1	1	1	1	1	0	0	1	0 ^g	0 ^h
	7	.	0	0	1	1	0	0	0	1	1	0	0
	8	.	0	0	0	1	0 ^c	1	$\frac{1}{2}$	$\frac{1}{2}$	1	0	0
	9	.	0	0	.	0 ^b	1	0	1	1	0	0	0
	10	.	0	$\frac{1}{2}$	.	1	0	0	1	1	1	0	0
	11	.	0	0	.	0	0	0	1	0	1	0	0
	12	.	0	0	.	0	1	0 ^d	1	$\frac{1}{2}$	1	0	$\frac{1}{2}$ ^h
	13	.	0	$\frac{1}{2}$	.	.	.	.	.	.	.	.	.
	14	.	0	0	.	.	.	.	.	.	.	.	.
	15	.	1 ^a	0	.	.	.	.	.	.	.	.	.
	16	.	.	1	.	.	.	.	.	.	.	.	.

N.B. The mark 1 indicates a complete blink; $\frac{1}{2}$ indicates a partial blink.

^a At the same moment as the bang, door opened and *E* came into the room. ? Summation of stimuli.

^b Had just turned away from looking at me when the 9th bang took place; and at the 11th she was in the act of so turning.

^c *A* was now within sight and *Y* interested in gazing at him. This day (117) she was tested when ready for her meal and at bang No. 12 she was turning towards *E* making food grunts.

^d On D. 118 she was held by her nurse and was gazing all the time at her mother's face.

^e Looking smiling at me.

^f On D. 120 after No. 1, *Y* was feeding continuously during the experiment. At every bang, after the 2nd, whether there was a blink or not, she took her face away from the breast and looked up.

^g For 6th and following tests *Y* was placed on bed instead of on mother's knee but it was impossible to place her where she could not see one of us and yet be where her eye-blink could be seen. She was in a most jovial exuberant mood at the time of this test, laughing and crowing. A drop of 5 feet was tried for No. 12 without avail.

^h A slight frown occurred: in cases 5 and 12 there was a delay of a fraction of a second.

THE VARIABILITY OF A REFLEX UNDER VARYING GENERAL CONDITIONS.

In view of the great instability of the blink-reflex without any apparent variation of external conditions to account for it, we are more prepared to find that varying bodily conditions, emotional states, etc., may affect markedly the happening of a reflex. I often observed with *B* that crying at a strange sound and other 'fear' reactions were less likely to take place when the baby was nursing than at other times. Similarly Miss Shinn noted that the eye-blink, which took place at the ringing of a bell, did not do so when the child was nursing¹. In the case of reflexes which are associated with emotional states (for example, blushing, paling and starting), it is not surprising that a special condition

¹ *Notes on the Development of a Child*, p. 107.

of the whole organism may inhibit the emotion normally produced and so the reflex associated with it.

In view of the known central interference or facilitation of reflexes, of the general influence of the cortex on reflexes (both by way of unconscious inhibition and in some cases of the voluntary initiation of the usual reflex action), and of the effect of fatigue on reflexes, one would expect *a priori* that varying conditions of the central nervous system and especially strong instinctive impulses and emotional states would have their influence on the appearance in infancy, even of those reflexes not usually considered to be specially related to emotions or instincts.

The neglect of this possibility has led to a failure to interpret aright the variability of some reflexes in individual cases. No doubt individuals vary as to the strength and fixity of certain reflexes, and the relative maturity of the child at birth may have its influence on the date of the appearance of some reflexes. But some differences in the results of tests on different children are almost certainly due to the influences of the general psychophysical conditions of the children at the moment.

THE FINGER-GRASP REFLEX.

A good example of this may be found in some observations I made on the finger-grasp reflex. Very varying reports have been made on this reflex. Dearborn noted it in his daughter on D. 1, "strong and quick," and found it "notably less vigorous" on the 10th day. Preyer mentions a marked difference between his two children, and on D. 12 *A*'s finger-grasp was not nearly so strong as *B*'s at the same period. But the reports on *B* and *Y* are suggestive of the effect on the reflex of emotional influences. They are, on *B*:

D. 1: "Grasped my little finger with left hand, but not strongly."

D. 3: "When held on back, preparatory to bath, groped vigorously with hands and arms, as though for something to hold. When his father's head was offered he grasped the hair and tugged vigorously: his hand had to be unclasped."

There was of course no deliberate groping at this stage. There appeared to be simply more vigorous and sustained spontaneous movements than usual under the stimulus of excitement through vague feeling of insecurity due to suspension in the air.

In the little girl *Y* the finger-grasp was weak on D. 3 as she lay comfortably on her nurse's knee. When at my request she was held aloft rather insecurely on the nurse's hands the grasp was much stronger,

till the arm was stretched fully out: though it would not support the weight.

Of *B* I noted again on

D. 8: "Finger grasp not shown to-day."

D. 10: "No grasp of my hair when put to his hands which were groping and feeling about."

These were but two of frequent tests of the kind giving negative results.

The next record indicates the presence of the reflex during sleep when inhibitory central influence, if developed at this early stage, would be at rest or lessened, an observation, therefore, not strictly comparable with the earlier and later ones. Finally, on D. 20, when *B* was in his bath, which judging from facial expression invariably caused "a combination of pleasure and rather fearsome excitement," the reflex was noted again. "In his bath to-day he had my head presented to his clutching hands. He took a firm grasp of my hair with his right hand—quite painful. I raised my head slowly, but he held on, being raised almost out of the bath (with some support of nurse). Then his hold gave way and he dropped a little with a very short, sharp cry."

In these early days then, a strong finger-grasp reflex was noticed in *B* and *Y* only under conditions of some excitement. It may be remarked that the remarkable consistency of strong finger-grasp found by J. B. Watson was obtained when the children were entirely suspended by and dependent for support on the grasp¹.

It would be useful if a sensitive dynamometer could be made suitable for testing the strength of a baby's hand grasp. The difficulty is to get something thin enough for the tiny fingers to enclose. With *Y* I endeavoured to do this by attaching a round pencil with wire to the hook of the nurse's sensitive spring balance made for the purpose of weighing babies. Two observations I made with this on *Y* are germane to our present topic.

D. 25: "Took the opportunity of nurse cleaning *Y*'s nose (to wake her when she fell asleep too soon in feeding) to test finger-grasp with balance. Got the handle with difficulty into her left hand—very gentle grip: thumb went round very readily (boy's grip). When nurse inserted cotton wad in nostril, grip greatly increased and registered 2 lbs. pressure. Then I tried right-hand grasp: even slacker at start and thumb would not be placed in 'opposed position.' Insertion of wad in nose led to greatly increased grip, 1 lb. registered before it lapsed."

¹ *Psychology from the Standpoint of a Behaviorist*, p. 262.

The Finger-Grasp in Sleep.

The finger-grasp was not shown in sleep by *A* on D. 12, and was absent when *Y* was tested several times during sleep in the first few weeks. Gesell mentions the absence of the reflex in new-born infants during sleep. But that it may continue during sleep, having started before, is shown in observations on *Y*. Thus:

D. 16: "With a view to testing the length of the finger grasp and the existence of a 'refractory period' (which Sherrington has shown to be characteristic of reflexes and a means of avoiding tetanus) I inserted my little finger carefully in *Y*'s left hand (when she was having an interval in a meal) and on her grasping it I applied a slight pull. Her grasp continued for 35 seconds, including two periods of specially tight grasping, and then the hand was jerked away. The next grasp lasted only 15 seconds, but she was restless for food. On being placed to the breast she grasped my finger readily again and this time the grasp resisted my gentle pull for 7 minutes without a break though there were slight variations of pressure. At 5 minutes her eyes closed and sucking ceased and she apparently slept, but the grasp continued." Certainly if there is a refractory period in this reflex at this age, it is only in the sense used by Sherrington in referring to heart beat: "To-day, by refractory phase is understood a state during which, apart from fatigue, the mechanism shows less than its usual excitability."

Again on D. 18: "Finger grasp of 10 minutes this morning: (I think this was left hand). Steadier than D. 16, firm all the time with occasional tightenings: not rhythmical, but sometimes coincident with a little excited worrying at the nipple as though in half falling asleep she was losing it. Having apparently slept momentarily several times she seemed to go 'right off' at 8 minutes, and at 10 minutes fingers moved about and hand jerked away (not simple relaxing of grasp)."

The Finger-Grasp in Right and Left Hands.

By the end of the second month in the case of *B* the reflex was more established in the right hand but not in the left.

D. 65: "He took a very firm grip of my finger with his right hand but only after some time could I get him to do the same with the left, and then it was very lax. Right hand kept hold even when I pulled his hand up and down and sideways."

Later on D. 65: "Again the right hand grip stronger than the left, and left gives way sooner." "The right grips are almost proper; not

quite opposition of thumb to fingers but thumb round end of my finger. I noticed that, as he lay in cot, he was holding his right hand with thumb clenched outside—'boy's grip,' but with left hand thumb inside fingers—'girl's grip.'"

D. 66: "Both hands 'boy's grip'—later boy's grip in right, 'girl's grip' in left."

With *Y* the right-hand grasp seemed definitely stronger on D. 13.

On D. 23: "Y in bath. Right hand took my finger but I could hardly insert my finger in left hand."

On D. 25 however the left hand gave a 2 lb. pull against a 1 lb. pull of the right: later notes to be quoted shortly, suggest that the superiority, if any, definitely passes over to the right.

The tables given by J. B. Watson (*op. cit.* p. 261) show that *on the average*, among a group of children, there is little difference between the reflex grasps of the right and left hands respectively. But this is quite consistent with marked differences between the hands in individual cases. It will be seen that the superiority of the right-hand reflex grasp in *B* was followed by precocity of the right hand, as compared with the left, in voluntary grasping.

THE TRANSITION FROM REFLEX TO VOLUNTARY MOVEMENT.

About *B*'s 10th week, signs appear of deliberate movement of fingers and hand and it is difficult to distinguish the finger-grasp reflex from voluntary movement. Thus, D. 71: "He often holds his two fists together nowadays, and less often bangs himself in the face. Once or twice in this last (9th or 10th) week we have seen him 'rub' an eye, and we hear him scratching his eiderdown in the night, due apparently to opening and shutting of hand. For some time he has grasped his mother's blouse, *e.g.* when bathing, but this is possibly reflex."

Miss Shinn noted in the 9th week that "the primitive reflex clasping became longer and more attentive, a development in the direction of grasping." (In view of my observations on *Y*, however, *e.g.* D. 15, it is impossible to regard the length of the grasp as indicative of voluntary grasping.)

Yet *B* on D. 75 still shows the reflex grasp in sleep. "Hand-grasp reflex occurs in sleep: though touching on knuckles does not open hand." [Is this (occurrence in sleep) perhaps a good test for reflex (or habitual) as against voluntary nature of an action?]

D. 78: "Shows no desire to take hold of small silver vase. Even the reflex grasp is slow to-day."

D. 80: "Right fist grip is 'boy's,' left 'girl's' again."

D. 81: "Stroked and grasped at *E*'s hand again while feeding."

On D. 83: "Carries his dress up to his eyes with both hands and gazes at it (shown by marked convergence of eyes). Once got it quite close up to his left eye and held it there till he cried."

So there was possible by now a steady hold, and from now the reflex proper seems to be lost as the power of voluntary movement develops. This period of transition coincides with the period of movement in general of the hand; and of an *interest in watching the hand*. Thus D. 85: "Carries his dress with both hands into his mouth. Held right fist steady (almost perfect) about 6 inches in front of face, eyes fixed on it, converging."

D. 86: "Looks at right hand again, about 6 inches from eyes, moves eyes to follow the small jerky motions of the hand, though hand very steady on the whole. He is now gazing at blue ribbon held in his hand, he carries it nearer and nearer his eyes, eyes converging to a squint, till he sometimes gets it right against an eye."

"Looked steadily at small silver rattle when I rattled it. When I put it in his hand he held it still and gazed at it."

D. 88: "*E* says that he was touching fingers of one hand with the other to-day, looking at them meanwhile."

A photo taken before the end of the 10th week shows the right hand bringing a silver rattle close up to the mouth with sight concentrated on the rattle, while the left hand with arm extended grasps his dress. The note on the photo shows my interpretation at the time: "Beginnings of voluntary movement with right hand, reflex grasp with the left." Several observations suggest this later development of voluntary movement of the left hand corresponding to its inferior reflex powers: *e.g.* D. 96: "Pencil put in right hand was taken to the mouth almost at once (three times); when put in left was dropped after a few seconds (twice)."

A similar performance was noted in the case of *Y* on D. 91: "Again fixating left fist, repeatedly over period of several minutes: when it was moved away (not so jerkily as of yore), it was *steadily* moved up again and gazed at for perhaps 15 to 20 seconds. Meanwhile right hand was grasping dress as *B* in photo of 10th week."

During this period of the beginnings of voluntary movement the influence of the reflex seems to remain especially in the effect of touch

in stimulating the hand-grip. The earliest voluntary grasping seems to require the accidental touching of the object.

D. 90: "No attempts to grasp object (yellow pencil) held up to him (B), though he looks at it. Touch on knuckles opens right hand."

D. 92: "Looks interestedly at rattle but does not grasp it till it touches his hand; still looked at it when grasped."

Miss Shinn also noted in the 12th week that a touch on the back of the hand suggested grasping. Several notes on B at this time suggest that the voluntary movement of the arms combines with a reflex grasp of the hand at touching an object, to effect what to superficial observation looks like a volitional movement throughout.

The hands naturally, in the course of voluntary or of spontaneous jerky movements, frequently come into contact and they now begin to grasp one another.

D. 95: "Feels his hands and fingers now with his thumb and finger opposed, *e.g.* taking right finger between thumb and first finger of left hand."

The *interference of a reflex grasp with voluntary movement* was suggested on

D. 95: "I held silver rattle before his eyes. He was grasping left hand with right and merely gazed at rattle till I held left hand down: then right hand groped about till it touched mine and then moved to rattle and up to mouth."

The development of the power of inhibiting such merely reflex grasping (useless for the purpose of the moment) is evidently one condition of the advancement of voluntary activity. The possibility of interference of a reflex in voluntary movement is shown still more clearly in notes on Y.

D. 130: "Red pencil held in front of her, just in reach. Left hand moved and took hold of it at once. Same repeated: this time her hand caught on to my hand and tightened on it, though gaze continued on pencil. But she failed to loose my hand and carry hand to pencil. So later." Reflex apparently still working inevitably and not within control.

D. 132: "Pencil held in front of eyes: both hands moved up towards it: missed it and clasped one another: clung thus for a time; a grunt and impatient movement of locked hands suggestive of impotence or annoyance. (Later left hand succeeded but let fall at once: right hand succeeded and held.) Again reflex interfering."

A still clearer case of reflex grasp interfering with voluntary grasping was noted on D. 168 in Y.

D. 168: "Voluntary movement clearly hindered to-day by reflex grasp. She was holding ring in right hand and putting it to mouth when a straw mat was put on her chair table. This greatly interested her and she put down her hands to it at once repeatedly (still grasping ring), and occasionally brought hands back to the face with apparent disappointment, hands being put down at once again to mat still grasping the ring. After repeated efforts ring finally slipped from her hand, and now mat was immediately grasped and instantaneously carried to the mouth. Left hand had meanwhile part of the time been grasping another ring and afterwards seemed unable to manage to grasp mat alone. More attention seemed to be given to right hand."

SIGHT AND TOUCH CO-ORDINATION

Sight seems to affect the grasping at first by simply providing a stimulus for groping. Thus

D. 95: "Held yellow pencil up. He gazed at it: right hand groped towards mine till it grasped mine, felt resistance of my hand, moved on, grasped pencil and at once carried it to mouth, mouth opening wide long before pencil reached it, mouth and hand acting as one."

Yet touch apparently remains for some time the necessary stimulus for the grasp for on D. 97 I note: "There are no signs of grasping at things seen." But the child is constantly having practice in gazing at things held and moved about, and even in the act of grasping. Thus

D. 100: "Put in cot. Seizes eiderdown edge in both hands, moves them towards one another, then back, sometimes till they touch, gazing steadily at left or right hand. N.B. Still moves the hand he is not looking at. This went on over 5 minutes." And

D. 101: "No attempt to grasp rattle at sight, though he watches grasp when rattle touched."

Suggestions that sight may prompt the groping occur on

D. 98: "Lying in cot, gazing at pink cover: he takes hold of cover with left hand and moves it to and from face. When it slips out of hand he grabs at it again, eyes still fixed in corner of cover. This may be the beginning of grasping guided by sight."

The difficulty of deciding at what stage the sight prompts hand movement and grasp, is due to the constant spontaneous movements of the hands. Thus on

D. 106: "He moved right hand towards pencil, when gazing at it, and grasped it (with thumb opposed). But this hand moving was going on before and pencil was in track between extended arm and mouth."

Finally on D. 107: "For first time felt sure of grasping suggested by vision (if not guided). *B* was crying for company, hands by side, not groping. I showed him his rattle and at once right hand began to move slowly outwards from body and towards centre line (left also moving a little towards centre), till it touched rattle which he then took and approached to face, put to eyes, then to cheek and then got to mouth."

With this there can be no doubt that we have advanced far beyond the early reflex stage; though in the left hand the form of the original grasp (*i.e.* thumb not opposed to finger) still remains.

The main impression I gain from my own observations on this development of voluntary movement and the lapse of the reflex grasp is that it is extraordinarily difficult to say when the reflex ends and voluntary grasping begins.

Titchener says: "The boy does not keep the baby's reflex, and import consciousness into it; the reflex lapses, giving way to other forms of movement¹." But there is a sense in which the reflex seems to be incorporated in, or at least used in the development of the voluntary grasp. There is *already* 'consciousness in the reflex.' The reflex grasp gives the child the identical kinaesthetic sensations which he has in voluntary grasping. As in the case of the random impulsive movements which a baby's limbs are constantly making, the reflex grasp provides him with the possibility of getting what Ward calls the 'ideal presentation' of the movement 'presupposed' by "the actual realisation of such (purposive) movement²."

If voluntary decision can inhibit reflexes, and emotional and central nervous conditions accentuate them and even thought stimulate them (as in "mouth watering"), why should not a desire and decision to grasp cooperate with the remnants of a more purely reflex response? We know that a one-time voluntary action may become mechanical, done without any rememberable consciousness, in fact become a 'secondary' reflex almost indistinguishable from a 'primary' one in its outward manifestations.

It is true that the attempt to initiate, strengthen, or even attend to some reflexes, is enough sometimes to inhibit them, as Darwin knew when he successfully bet his friends that they could not sneeze if they took snuff.

Yet we know that higher cortical processes eventually learn to initiate certain reflexes which continue also at other times to take place

¹ *Text Book of Psychology*, II, p. 454.

² *Psychological Principles*, p. 52.

in a purely reflex manner. Thus we can initiate the act of swallowing, or winking which take place sometimes as pure reflexes.

Physiology has not solved this problem, though as Sherrington points out "It is urgently necessary to physiology to know *how* this control—volitional control—is operative upon reflexes, that is how it intrudes, makes its influence felt, upon the running of the reflex machinery¹." "We may premise," he goes on later to say, "that some extension of the same processes as [are] operative in simultaneous combination and in successive combination of reflexes, must be operative in this control. There (in Lectures 5 and 6) we saw reflexes modifying each other, and the more complex reactions being built up from simpler and more restricted ones. Some extension of the same process should, in view of our inferences regarding the nature of the dominance of the brain (Lecture 9), apply here also."

On the psychological side I venture to suggest that we may gain some insight into the process through two facts of which we have seen illustrations: first that a reflex may itself appear in a feeble or evanescent form, as in the feeble hand-grasp reflex, the half-blinking of the eye, or the evanescent walking 'reflex' or arm-raising 'reflex' to be described shortly; and second that the *idea* of a stimulus may become associated with a reflex action and so act as its efficient stimulus. In this way there may grow from a consciousness of the reflex action the anticipatory idea of it. Physiologically there may be 'drainage' of energy away from the lower to the higher nervous centres, so that the cortex becomes the most efficient stimulus, though remnants of the true reflex may still appear. These suggestions would not of course apply to the voluntary control or initiation of reflexes which continue to act as strong reflexes; but it may be the process by which some developments, such as that of voluntary grasping, take place.

THE EVANESCENCE OF A REFLEX.

In the finger-grasp reflex we had an example of a reflex which wanes and ultimately disappears as voluntary movement takes its place.

THE ARM-RAISING REFLEX.

An even clearer case of an evanescent reflex is the tendency to throw up the arms over the head in response to a loud strange noise or

¹ *The Integrative Action of the Nervous System*, p. 388.

other cause of shock. The first appearances of this response in *A*, *B*, and *Y* are during sleep, my first note on *B* being

D. 25: "Threw up his arms on being taken up when asleep. His mother says he has often done this."

D. 32: "Threw up hands over head when asleep to-night, when cot was bumped by door."

So with *A*.

D. 36: "When *A* asleep *E* bumped the end of the couch. *A*'s hands shot upwards without his wakening. The same happened in response to a shout."

In *Y* as early as D. 19, the jerking of the cot as she lay sleeping led to a sudden raising of both hands to the level of the lower jaw—three times, though less decidedly the third time. By D. 40 her mother noted that she had not yet seen this arm-raising when *Y* was awake. Notes of a few weeks later on *A* and *B* show the response occurring in waking life.

D. 52. *A*: "I tore a sheet of newspaper: he threw up both his arms with a jerk. I repeated tear, louder if anything. No response, three or four times, except interested watching."

D. 66. *B*: "After chatting with him a quarter of an hour to-night, I made a noise like a hen cackling, and up went his arms half way; so several times."

It is notable that this response took place both during sleep and waking, and that it may take place, as Dearborn also found (on the 10th day), without the child being wakened by the shock which causes it.

Moving of the cot when *Y* was asleep caused the arm-jerking response on D. 77 but not on D. 93.

On D. 134 (*B*) arms are still "thrown above the head when sleeping in pram which was accidentally jolted."

This is the last note of the kind, and before the period of infancy was over this reflex disappeared and we have in it probably the clearest case of a transient reflex. A similar movement, or at least a partial lifting of both hands occurs in some adults under shock or surprise, but I have never yet seen it in any of my children at later periods.

I cannot find any record by other observers of exactly this arm-throwing reflex in response to sound or shock, except that of Dearborn, but I was able to confirm my observations on two of my boys as has been noted, by those on one of my daughters.

In the records of some other observers, though there is no reference to a decided throwing-up-of-arms reflex, there are indications of some-

thing like a reflex lifting of the hand to scratch. Preyer refers (D. 14) to the raising of the left arm when the left temple was touched during sleep: at 7 weeks, however, the right hand was raised to the left temple, though the left hand was perfectly free to move. Pflüger, however, found that with a boy of three, the right arm was raised when the right nostril was tickled during sleep, and the left arm when the left nostril was tickled.

In the case of my boy *B*, on D. 118, when he was asleep on his right side, "a touch on the right eyelid produced convulsive movements of both arms; a touch on the left eyelid caused similar movements of both arms, and then the left (free) arm waved about further than before."

The latter responses seem to me a blend of the arm-lifting reflex and possibly a slight tendency to a scratching reflex or at least defensive movement shown in a purer form in the observations of Preyer and Pflüger.

A further interesting observation of Pflüger's is worth recalling in view of some of the more recent work on the scratching reflex in dogs.

"Pflüger laid both arms of the boy, who lay on his back asleep, gently near the body, held the left arm firmly with a light pressure, on a pillow placed upon it, and holding a feather in his free hand, tickled the left nostril of the little fellow. Immediately the left arm was moved, but could not be brought to the face. The child then made a grimace, and tried, after repeated tickling on the left, to press the left nostril with the right hand, whereas he had at other times always chosen the hand of the same side, however much and however long he was tickled, until he awoke¹."

THE WALKING REFLEX.

There are indications in my notes of a very early but evanescent walking reflex.

As early as D. 2 I noted, as to one of my boys "When held, and feet just allowed to touch floor, performs quite regular walking movements: progressive, forward movements, not mere pressure against floor, or lifting up and down."

D. 9: "Walking reflex still present, as decided as before." The movement is something distinctly more than the response pressure of the foot when pressed by the hand. There was a movement upwards and forwards of the foot, which was then rather heavily stamped down.

The tendency seemed so unusual that I checked the observation

¹ See Preyer, *Senses and the Will*, p. 221.

on another boy, and on D. 11 noted "Walking reflex very evident, much more so than on 2nd or 3rd day when his nurse tried it; in fact it did not then show perceptibly."

I have not noted the days of the first appearance of this reflex in my daughter X but I noted D. 14: "Walking reflex practically gone in X."

Also in A on D. 20: "Walking reflex scarcely evident."

In B, however, it remained later.

On D. 24: "Still 'walks,' not so well on slippery bath bottom as on knee."

But on D. 66, "Walking reflex almost gone now; just extends both legs." And D. 112: "Great delight at being held up so that feet touch couch: legs move up and down, but not nearly so regularly as in earlier weeks, and with no forward movement."

In no other records have I found so early an appearance noted. Preyer quotes Champney's account of his child showing similar movements in his 19th week¹.

Preyer himself noted it in his own child in the 41st week.

It is not clear however from Preyer's account, that this walking impulse, at a period so late as the 10th month, can properly be described as merely reflex.

Preyer ceased to practise this walking impulse in his child for two weeks but found it after that period still present. From now onwards standing, supported by one hand, resulted in genuine walking, with weight not entirely supported by another.

It was not until the 9th month that J. M. Baldwin noted a 'native walking reflex' in his daughter, and at first this resulted in walking backwards².

Miss Shinn referring to Champney's child says that in the case of her niece "there was no sign of any instinct to walk³." Other observers so far as I know make no reference to it. Possibly in some cases it was not looked for at the appropriate time, or perhaps we have here an example of individual variations in the very existence of an unstable and evanescent reflex. For example I noted no sign of it in Y during the first fortnight: she would only press her feet downwards against the floor when held in a standing position. On D. 17 she did take three consecutive steps forward, but no more.

¹ Preyer, *The Senses and the Will*, p. 274.

² *Mental Development in the Child and the Race*, pp. 78, 9.

³ *Notes on the Development of a Child*, p. 334.

In any case we have fairly definite evidence from several independent observers of the existence of such a reflex, which may either merge into the real act of walking as in the case of Preyer's son, or lapse long before the true walking period as in the case of my two boys.

THE INHIBITION OF REFLEXES.

The inhibition of a reflex by another reflex or by a strong sensory stimulation of some part other than that involved in the reflex is a familiar fact. And the influence of the cortex as a general inhibitor of reflexes is also now well recognized. Yet we are still ignorant, writes McDougall, "of the nature of nervous inhibition of the antagonistic reflexes which extend and flex the limbs¹." McDougall's own theory of drainage of energy of one nervous arc by another is applicable to the inhibition of reflexes and might theoretically be extended even to neural systems of the highest order, corresponding to the influence upon one another of complex systems of ideas or feelings. The term inhibition, however, is usually confined to effects of a simple kind, produced upon a reflex or other movement by a relatively simple stimulus or by volition or by the general condition of the organism.

The influence of the cortex as an inhibitor of reflexes has in recent times been strikingly illustrated. Drs Head and Riddoch found in patients whose spinal cords had been completely severed, much more violent and general reflex responses to stimulation in a part of the body below the injury, which they call "mass reflexes" and which are absent when the normal connexion with the cortex is present².

Preyer denies the possibility in a new-born child of inhibition of "reflexive activity of the spinal cord" by cerebral activity because of the immaturity of the brain. It is true that Preyer quotes the case of a brainless infant whose violent screaming was easily quietened by letting him suck a finger³, but he maintains that this may be regarded as reflex inhibition on a lower level.

Dearborn writes of the inhibition of crying in his child on D. 1, by stroking the forehead, and holds that at the early stages such examples of inhibition are purely reflex processes⁴. Dearborn does not state whether this was a solitary test, and the possibility of mere coincidence must of course be borne in mind.

¹ *Outlines of Psychology*, p. 280.

² H. Head and G. Riddoch, *Brain*, XL (1918); G. Riddoch, *Brain*, XL.

³ *Senses and the Will*, p. 228.

⁴ *Moto-Sensory Development*, pp. 3 and 4.

If we accept the usual classification of crying as a reflex and denote every interruption of it, in the early stages, as an inhibition, then every mother is familiar with the possibilities of such 'inhibition' by rocking to and fro, or by the stimulation produced by a warm bath.

In distinction from such general influences, however, which may mean the mere removal of sources of discomfort, my own observations confirm and extend Dearborn's in showing the effect of quite simple and localized sensations in inhibiting crying under a strong stimulus. To guard against mere coincidence the tests were often repeated. But the *manner* of the response is often significant.

D. 3: "*B* stopped crying twice when watch held near eye: but not on two other occasions."

D. 5: "As he was lying crying with eyes closed, I took rubber teat, moistened end with drop of milk and held it near his nose, taking great care he should not touch it or me. He quietened at once, opened eyes wide, and made sniffing noises with his nose." "For first time got clear case of inhibition of lusty crying by rubbing forehead. A few minutes after same failed, but rubbing nose succeeded at once."

This last test was done on *A* on D. 4 with the same result. I still vividly remember how very sudden such inhibitions were, so different from the gradual stopping of crying, and the lapsing into lesser and lesser sobs and gasps, observable in an older child when comforted. Sherrington, it should be noted, emphasizes the suddenness with which reflexes cease under inhibition as contrasted with the gradual ceasing due to fatigue¹. Similar tests were repeated successfully on days 6, 8 and 10 (twice) and on D. 24.

D. 14: "Loud and long continued crying suddenly stopped by nurse's 'Brrrrh' sound: this repeated two or three times. I stopped thus a howl cry when only the first gasp had been started."

D. 15: "Repeated crying stopped by my closing his mouth and holding finger tip moistened with scent to his nose."

D. 16: "Crying inhibited by 'Brrrrh' sound, three or four times. Never failed, even when mouth gaping to yell."

D. 18: "Loud and long continued crying (hungry) stopped at once by bath, as soon as hot water on head. Crying renewed after taken out of bath."

On D. 20 crying was stopped at once and for a long period by loud playing of low chords on the piano. Such inhibitions by sight and sound (and not merely by touch) prove the influence of processes in the cortex,

¹ *Op. cit.* p. 221.

the "ganglion of the distance receptors," as Sherrington calls it. It is inaccurate to use the term 'inhibition' for the results of the mere removal of the cause of crying, as for example by feeding or providing a child with company when it is lonely (*e.g.* by his mother taking him into bed, though without entertaining him, D. 29); but something more is evident when a strong craving, such as hunger, is inhibited by a new sensation breaking in, as in

D. 46: "Inhibition of nursing to-day (for the first time as far as I have seen) by *E*'s brushing his hair—repeated three times. Previously I have tried sounds and rubbing of head but failed to divert attention during nursing."

So D. 47: "Nursing last night stopped (three times) by electric torch."

D. 64: "Yelled when being dressed (was obviously very hungry) after a train journey. This hungry cry is notable because it can so suddenly come on. Yelling completely stopped for 2 minutes or more by my playing *g°-b-d-g'* (common chord) and a lower chord. But this ineffective later."

The renewal of crying immediately on removal of the inhibiting stimulus was noted on days 35 and 50.

D. 35: "Hungry crying stopped—four times by octave *c°-c'* loud, and then *c°-e-g-c'*; crying again when I desisted."

D. 50: "Stopped crying out loud (hungry) while I was playing loud bass chords on piano. Crying resumed when I stopped."

In *A* repeated crying during the 7th week was several times stopped by putting a watch to his ear, or dabbing a drop of scent on his lips. So with water.

D. 66: "Loud cries (3 minutes) stopped at once when drop of 'Lily of the Valley' scent put upon his upper lip and under nostrils."

D. 67: "Got restless—even after being on my knee on his stomach—cries began (hunger?)—not stopped by moistening upper lip with water; but 'Lily of the Valley' scent on same place (after drying) produced a big smile and cooing."

McDougall in his *Physiological Psychology* (p. 36) remarked that 'inhibition' seems always to be the result of the simultaneous excitement of some other motor system. As we have seen above, however, sensory stimulation by smell or sound or touch may 'inhibit' crying or feeding without any following *movement*; and McDougall himself, in his later *Outlines* seems to apply inhibition to the physiological side of such processes as the diversion of attention by the attraction of a more interesting object¹.

¹ See p. 230, and preceding two pages.

When the child enters the third month, processes become so complex that one finds few examples for which the term 'inhibition' is not too simple—unless one is prepared to use it for every interference of any process by any other, as some writers do.

The psychological changes are that the objects are becoming more *meaningful*: they are not a mere stimulus of a given sense: their effect 'spreads.' Thus:

D. 73: "When lying crying, and I had failed to entertain him, his mother came up to where he could see her (and spoke I think) and he looked earnestly at her and smiled." (This note is queried as possibly the first recognition of his mother's face.)

No doubt widening of appeal itself is correlated with the taking over by the cortex of control of some of the reflexes which were before relatively independent.

A striking or *novel* stimulus, however, will still inhibit crying with the suddenness characteristic of the earlier inhibitions. Thus my imitation of a cock crowing on D. 74 "stopped a loud hunger cry."

D. 82: "Quietened by papers being put over his head. When covered with coat, no attempt to remove by means of hand—look of surprise when it was moved." This was again successful on D. 83.

The influence of novelty is further suggested by a note on D. 62.

D. 62: "My deep 'mooing' stopped his crying (hungry) *at once* again. It seemed to be losing its power to do so when I left home (a week ago)."

With the increasing powers of the infant, any object can now provide many ways of activity, mental and physical, and so can provide variety for attention and for hands. We may look on the process of development physiologically as an increasing of the number of incoming paths which can provide an inhibiting stimulus (by the complication of meaning and feeling, with the senses of sight, sound or touch) and by the increasing variety of stimuli which can inhibit—while at the same time there is the elimination, as inhibitors, of a large number of stimulations which have previously been powerful enough to inhibit. At this stage, however, the term 'inhibition' is rarely adequate, though inhibition of the simpler type seems to occur at times when there is a momentary resemblance to the conditions of the more simple reflex arc, or when, as in cases of fatigue, there is inhibition of muscular movement in spite of every effort of volition; or where, while the inhibiting influence is the cortex—as in volition—the impulse inhibited is a reflex or a spontaneous and almost inevitable 'expressive' movement.

A somewhat pathetic record on D. 388 indicates the period by which

the crying reflex was itself brought within such inhibiting power of volition even when the exciting stimulus was exceptionally strong.

"B had learned to say 'Ta' in order to obtain things; also when on my knees and crying to be set up, he had frequently stopped crying suddenly and substituted 'Ta'—with instant success. On D. 388 he got unobserved into a room in which the bars of the grate were still hot, though the fire had been raked out, and he badly burned the palm of one hand. After crying violently for a minute or two there was an evident and heroic effort to stop the crying, and in the midst of half stifled sobs he gasped out 'Ta, Ta, Ta' repeatedly. Control of the crying reflex was certainly shown earlier than this, but here it was evinced in spite of probably severe pain."

MUTUAL INHIBITION OF ANTAGONISTIC MUSCLES.

The mutual inhibition of movements of certain sets of muscles is well known. The contraction of the muscles which bend the arm automatically inhibit the contractions of those which extend the arm.

The notes I made on the movement of the arms strongly suggest that even this fundamental inhibition did not take place during the earliest days, and that both sets of muscles were constantly contracted together.

D. 5: "There is strong resistance to passive movement both in arm and head, so strong that I fear to force it."

D. 8: "Hands in constant 'jerky' motion, as though both sets of muscles were normally at tension, and then suddenly one set were relaxed: for arms are stiff to resist my movement"—when one of these jerks was not occurring.

D. 6: "The resistance of the arms to passive movement was very strong," though there was 'very little tension' about the arm muscles during sleep.

If my surmise is correct it would seem to be a further example of the general principle that as the higher centres which are especially the organs of inhibition are not fully developed in early days, inhibitions dependent upon them do not take place. Indeed the contracting muscles may at times even be reflexly stimulating one another, as Sherrington thinks possible under the influence of strychnine¹.

Later however this tension disappears.

D. 46: "His arms seem less at tension now than in early days."

D. 64: "His arms are much more lax now—submission to passive

¹ *Op. cit.* p. 106.

movement; and his active movements are less jerky—more steady and continuous.”

In the case of *A*, it was noted that on D. 29 his resistance to arm movements was much stronger than in early days. In the case of *A* also, the hand grip was much stronger at this period than earlier: one or two of his reflexes seemed to develop later than in *B*; and the coincident contraction of opposing muscles seems also to have appeared later.

By D. 64, however, *A* showed the same condition as that indicated in the notes of *B* the corresponding day, quoted above.

REFLEXES AND INSTINCTS.

It is of special interest to note the evidences at this early stage of the activities which apparently blend reflexes and instincts.

REFLEX OR INSTINCT: THE SUCKING IMPULSE.

The process of food getting if carefully studied impresses on one the difficulty of drawing a hard and fast line between reflexes and instinctive actions.

Dearborn¹ refers to sucking as a reflex. Stern calls it an instinct².

Miss Shinn³ after writing—“Sucking, if an instinct and not a reflex” comes down on the side of instinct, partly because it ceases with satisfaction and partly because it can be initiated without external stimulus. She adds that as the child grows older, sucking loses the traits of a reflex that it at first promised, and becomes purely voluntary.

Preyer⁴ after remarking that ‘Intellect’ must be excluded from the process of sucking, seeing that a child without a cortex sucks, argues that sucking is not a pure reflex, in that a babe sucks only when it is hungry. Similarly Koffka, mentioning among other things this characteristic of an instinct, namely that ‘there must be a particular state of the organism as a whole,’ says that this is true of sucking which he accordingly groups with instincts⁵.

My own observations suggest the existence of an evanescent reflex within an instinctive system. For observations on the first day (and

¹ *Op. cit.* p. 198.

² *The Psychology of Early Childhood*, p. 70.

³ *Notes on the Development of a Child*, I, p. 386.

⁴ *The Senses and the Will*, p. 258.

⁵ *The Growth of the Mind*, p. 87. Koffka later argues that reflexes are to be explained as instincts, instead of *vice versa* (p. 188).

frequently later) show that *B* would suck his thumb when he would not suck the breast. During later weeks—as mothers well know—a child will often suck its thumb when replete: but by then it may be argued that sucking has become a habit. The significance of observations on the first day or two is that the reflex seems to occur before a ‘habit’ based on the instinct could possibly be set up. Thus:

D. 1: “*B* sucked his right thumb even though he would not seriously tackle the breast.” There was practically no feeding on D. 1, yet so frequent sucking of thumb or fist, that I made the note: “Only right hand sucked so far.”

D. 2: “Though on one occasion he ‘nursed well’ he would not take food properly most of the day, and he was (forcibly) spoon fed several times by the nurse.”

Dearborn also mentions that his daughter would not nurse the first day, yet “suction on the fingers and the side of the fist was very strong and lively from the first morning.”

The contention therefore of Preyer that sucking is an instinct because it only takes place when the child is hungry, cannot be upheld.

The fact that it takes place so often in sleep is also in favour of its classification as a reflex, as is also the fact that a child without a cortex will suck.

There would seem then to be a reflex in the sense that the placing of an object of suitable shape, temperature and softness in the mouth produces sucking, even when food is not sought or desired. And this reflex is made use of in the wider instinctive process of food getting involving groping also for the breast; and undoubtedly the state of hunger is the usual stimulus at early stages at least of sucking actively. Later on the craving for the reflex activity is intelligently satisfied by placing the thumb intentionally in the mouth—as a craving for the release of the sneezing reflex may be produced by deliberately looking at the sun. This deliberate satisfying of the impulse sometimes seems to establish a habit or species of secondary reflex, which in some children is persistent for several years, and which even shows traces in some adults.

Its continued association with the craving for food even at the later stages of infancy is shown by the fact that a child will pacify itself when hungry by sucking its thumb vigorously.

D. 157: “Crying, very hungry. Soothes himself for a time with his thumb, and does not take it out at once even when put close to the breast.” Similarly on D. 162.

This child also, about this period, on being lifted in the night for a feed, frequently slipped his thumb into his mouth at once, before waking.

THE DISTINCTION BETWEEN REFLEXES AND INSTINCTS.

It has not been my purpose here to argue that there is no distinction between reflexes and instinctive actions, and even if we could not draw a definite line of division between them, the two names would be needed. For in psychology, where all parts of the whole mind are convenient but abstract conceptions, it is necessary to indicate by separate names, actions or qualities which stand out at stages in a continuous series even where no absolute break can be made.

It is, rather, my desire to illustrate some of the grades in the series from a purely mechanical and isolated action—the (theoretically) ‘simple reflex’ to the highly complex volitional actions: to show resemblance between actions usually classified as reflexes and others usually called instincts; and to emphasize the fact that reflexes may be linked up with and included in the main activities of instinctive systems.

SUPPOSED MARKS OF A REFLEX.

The difficulty of absolute separation of the two concepts is brought out if we examine some of the criteria offered for distinguishing reflexes from instincts.

(a) First, an instinct is said to be the ‘*reaction of the whole organism*,’ while a reflex is always a ‘*partial reaction*’¹.

Now we know that a reflex is dependent partly on the general conditions of the organism as a whole. It is even used sometimes as a test of general nervous condition. The nature of the reflex response is, at least in a negative sense, determined by the inhibiting effect of the cortex. But further, we have seen reason to believe, as in the case of the hand-grasp reflex, that an emotional state or even mild excitement may cause that reflex to take place when it would not do so otherwise, or it may intensify its strength. In other words, that the general condition of the whole organism may be one factor in *producing* a reflex, just as a more limited facilitation by supplementary sensory stimulations may be one factor, and an essential one as the physiologists have shown.

On the other hand, even an instinctive response is hardly a reaction of the *whole* organism in the fullest sense. In flight under fear the instincts of sex and acquisitiveness are in entire abeyance, and the intellectual

¹ E. B. Titchener, *Text Book of Psychology*, II, p. 464; McDougall, *Outline of Psychology*, p. 56.

interests of life—however powerful normally—are entirely inactive. One may defend this idea of a response of the whole organism better by reference to energy, and its concentration on the main end in view. “That is the type of the total reaction,” writes McDougall. “The vital energies of the whole organism are concentrated upon the task in hand¹.” And even to this I should prefer to add “the *main* vital energies”: for who can say whether some special energies are not correlated with the activities and interests which are quiescent at the moment?

An instinct then may be said to be a response of the whole organism only in the sense that no main section of the nervous system is entirely cut off from the more localized parts concerned with the action or from the possibility of influencing that action. And this may be true of a reflex.

(b) A second characteristic of the reflex is said to be the absence of any ‘profiting by experience².’

“The whole process is immediate and incapable of modification³.”

There is however some improvement in the sucking and grasping reflexes; though it is, of course, difficult to say how far this is due merely to ripening and how far to experience. The extension of the winking reflex to things seen approaching is properly a result of *association* of a new stimulus with other appropriate stimulus. And to the citing of such improvements or extensions the reply may well be made that in so far as there is learning or modification *as the result of consciousness*, there is something more than a reflex involved.

This, as I understand it, is McDougall’s reply when faced with the example of a conditioned reflex shown by Pavlov’s dog, when the bell had become associated with food and hence caused saliva to flow⁴.

It is, I think, perfectly legitimate to contend that such ‘reflexes’ are more than reflexes. I am at present simply concerned to point out that some ‘acknowledged’ reflexes are either capable of development, or at least of complication in that they become inextricably linked up with higher processes. This sphere may be extended by association—as in the winking reflex and the saliva flow. They may improve with experience, as in the grasping reflex, either by mere improved efficiency of the mechanism, or by complication with the beginnings of voluntary

¹ McDougall, *Outline of Psychology*, p. 57.

² *Ibid.* p. 54.

³ W. H. R. Rivers, *Instincts and the Unconscious*, p. 28. Dr Rivers just afterwards contrasts reflexes with conscious processes, so he may not have intended to include all reflexes under this statement.

⁴ McDougall, *op. cit.* p. 55.

movement. In the development of voluntary movement, there is at least learning *through* reflexes.

Finally, reflexes may be linked with instinctive processes as in food-getting and sex, so as to be almost inseparable if not psychologically indistinguishable. We need not then accept either of the two extreme opinions as to the nature of the long series of useful actions, such as the solitary wasp goes through in providing for the next generation—on the one hand that they are merely a series of reflex actions, and on the other that the whole process is instinctive. For a third view is possible, namely, that the whole process is one in which many genuinely reflex responses are embedded in a wider process, partly guided by consciousness.

(c) A third characteristic of the reflex is said to be its *Inevitability*. We have seen that the occurrence of some reflexes is dependent upon the general condition of the organism, and sometimes perhaps upon the relative novelty of the stimulus, or rather the recency with which the stimulus has been applied. The eye-blink which occurred on the first loud clap of the hands might cease on the third or fourth. A sneeze produced once or twice by looking at the sun, cannot be produced a third or fourth time without a considerable interval. If it is replied that this is mere fatigue, then variability of this type in instinctive process, and even in intelligent interests, might be attributed to fatigue. Apart from the influence of fatigue (as when the speeding up of the stimuli of the eye-blink results in intermittent misses of the reflex response) we found inexplicable variability in the eye-blink response to sudden noises.

Certainly, however, the typical reflex lacks that 'persistency with varied effort' characteristic of higher types of action.

There is, of course, the well-known example of the decerebrated frog, who will scratch his left side (irritated by acid) with his left foot: and then if the left foot is held up, will, after a pause, use the right foot. But as the physiologists themselves point out, the continued stimulation would by summation result in an overflow from the left side to the right side, and so produce a reflex¹; or as McDougall suggests, in an animal at this low stage the brain (as certainly is the case in some animals at a lower level) may not be essential for consciousness, and the frog's action may be conscious and 'purposive².'

(d) A fourth mark of the reflex is said to be the nature of its *dependence on external stimulus*. It "does not show that preparation

¹ Starling, *Human Physiology*, 5th edition, p. 606.

² *Op. cit.* p. 49.

for the coming situation shown by purposive behaviour¹." The reflex "is not prepared for by previous activity." "The reaction occurs when the stimulus is applied as a loaded pistol goes off when the trigger is pulled. Until the appropriate stimulus is applied the animal remains passive. On the other hand the bird gathering materials for its nest... takes the initiative...and goes out to meet coming impressions²."

This criterion seems to withstand criticism better. Some stimuli of reflexes, indeed, are within the organism: which brings them nearer to instinctive action proper, from this particular point of view. Admittedly, however, when there is prevision of a result and desire for it—even if it is a desire for the sensation of a reflex as in snuff-taking—there is intelligence and something more than a mere reflex. It may be noted here that the distinction between reflex and intelligent action or deliberate choice is much easier to make than is that between the reflex and the conception of instinct which holds that intelligence is not an essential element in instinctive action. One sentence at least of Stout's suggests that he could build up his conception of instinct simply by means of reflexes plus intelligence. "The difference between reflex action and instinctive conduct" he says, is that "instinctive conduct does and reflex-action does not presuppose the cooperation of intelligent consciousness, including under this head interest, attention, variation of behaviour and the power of learning by experience³."

Even the stimulus of the reflex is said to be outside of, or independent of consciousness. "When the sensation is present," writes Stout, "there is no reason for regarding it as a factor generating or influencing the reflex process itself⁴." It may be said that this does not seem to hold as to such reflexes as the eye-blink in response to objects seen approaching, or to a pretended hand clap, but these are, I have suggested, of the nature of 'conditioned reflexes,' that is, in part, 'habits.' In any case they are relatively simple responses to isolated sensations. It remains true, as Stout goes on to say, that instinctive activity, as contrasted with the more purely reflex, is "*guided by and adjusted to* complex and variable combination of different sense impressions⁵."

If some reflexes, however, are guided through sensations and even by our apprehension of varying sensations, and if also some are dependent

¹ McDougall, *op. cit.* p. 54.

² Stout, *Manual*, p. 343.

³ *Ibid.* See also his article on "Instinct and Intelligence," *British Journ. of Psychology* III, p. 244.

⁴ *Ibid.*

⁵ *Ibid.*

upon general conditions of the organism, it seems that the distinction between many actions generally regarded as reflexes and those termed instincts, is one of complexity rather than of absolute difference; and that it might be better that the term reflex should be kept for purely physiological reflexes, which contribute no element to consciousness, or at least no discriminable element; as for example the eye pupil reflex and some visceral reflexes. It would even then be an open question whether varying aspects of bodily sensation not discriminable by introspection, might not be factors in determining the reflex.

Finally, the fact that a reflex may occur in a decerebrated animal, or in a dead man, does not prove that the (superficially) same action is not influenced in some way by consciousness when it occurs in the living man or the whole animal. Indeed, one of the most significant things which recent physiological work goes to show is the difference between some reflexes in the intact organism as contrasted with the corresponding reflexes in the decerebrated.

My best thanks are due to Dr C. S. Myers, for reading the typescript of this paper, and for making a number of valuable comments.

AN ATTEMPT TO INVESTIGATE AND TREAT PSYCHO-NEUROSES AND PSYCHOSES AT AN OUT-PATIENT CLINIC¹

By THOMAS S. GOOD

THE Oxford Clinic for Nervous Disorders was opened for out-patients in 1918 at the Radcliffe Infirmary and County Hospital, Oxford.

The total number of pensioners and civilians treated from 1918 to the end of 1926 was 1101, made up as follows: civilians, 673; pensioners, 428. The number of *civilians* under treatment in 1918 was 33. The number of *civilians* under treatment in 1926 was 154. In 1919, 138 *Pensioners* attended; in 1926 only 5.

These patients include people suffering from all forms of nervous and mental ailments, who attend in the same waiting hall as the other medical and surgical cases.

The clinic was designated the Department for Nervous Disorders for the following reasons:

1. Mental patients would more readily attend for advice and treatment if they could do so without being singled out as mental.

2. As the difference between the neuroses and psychoses is possibly only one of degree (the so-called borderline), it was hoped that treatment could be given and the cases alleviated or even cured in the incipient stages.

3. It was felt that in all probability friends would bring patients, and others would attend of their own accord, at a clinic in a general hospital, whereas they would shun attending at a mental hospital because of the fancied stigma and disgrace attaching to the latter institution.

4. It was considered essential that organic and functional nervous diseases and disorders should be investigated as a whole and that the medical man in charge of the clinic should have a knowledge of all forms of mental and nervous illness.

Further reasons for choosing the General Hospital were:

1. That a general hospital is more accessible for the greater number of the inhabitants of a district than any other institution.

¹ A paper read before the Medical Section of the British Psychological Society on January 26th, 1927.

2. That specialists in all branches of medical science are there available, surgeons, orthopaedists, physicians, radiographers, masseurs, etc. Therefore a case can be referred at once to a colleague or *vice versa*—there is team work.

3. That it is obviously the most economical method as it saves duplication of expensive apparatus.

4. That the psychiatrist is brought into closer touch with the other members of the profession to their mutual advantage.

5. That it is an advantage for the general practitioners in the area to be able to send any patient for treatment or opinion and therefore increases their knowledge as to the diagnosis and treatment of nervous and mental diseases and disorders.

The clinic has no beds definitely allotted to it, for the reason that, in the present state of the law, certifiable cases cannot be treated on unlicensed premises for the purpose of gain, and as the Radcliffe Infirmary has a paying scheme, which is called the Twopenny Scheme, it cannot, till the law is altered, be definitely used as an in-patient department for cases showing marked mental symptoms which cannot be treated at an out-patient department. Though there is no definite number of beds allotted, cases are, wherever practicable, treated in the wards, and cases showing mental symptoms, which have been admitted for other diseases, do have psychotherapeutic treatment while in-patients at the hospital. Experience seems to show that even very severe cases of mental abnormality will and do improve as out-patients providing there is no marked organic disability, and if they require admission as in-patients their mental disability is usually of such a degree that they are only fit to be treated in a hospital specially equipped to deal with advanced cases of mental derangement, namely, a mental hospital. There are, however, a large number of people who are suffering from various forms of toxæmia, as for instance puerperal cases, cases of encephalitis, and also cases showing marked malnutrition, in other words exhaustion psychoses, which could with great advantage be treated if there were beds attached to the clinic. Many of these cases are treated under different physicians in the wards of the General Hospital, but this is possible only when the disease is of a mild form, and it would be a great advantage if beds could be provided for these cases, most of whom are certifiable, in the wards of the General Hospital. But as the law stands at present this is impracticable.

The question of treatment bristles with difficulties in deciding whether each case should be dealt with as in- or out-patient. It is difficult, if not

almost impossible, to lay down any hard and fast rules, but among the poor people where there are indications of severe physical illness and the home conditions are such that the patient cannot get the required rest and nursing, the case should be admitted as an in-patient, whereas the most severe mental symptoms will in certain circumstances clear up with out-patient treatment. In fact in many of these cases it would almost appear that in-patient treatment is contra-indicated. To make this point clear, in neuroses there is always an unconscious psychic cause, *e.g.* some decision the sufferer fears to make or wishes to avoid, and the illness is an attempt at evading the issue. Such patients fear what can only be termed their own psychic death, *i.e.* loss of reason. Their symptoms are an unconscious question to the medical man, a question which they fear he will answer in the affirmative. In their own mind they fear that they will lose their reason, that they will become mad. At the back, probably, of all cases which have been called 'nervous' or designated 'nervous breakdown' there is the idea in the patient's mind that eventually he will lose the power of thought and of normal self-control. Insanity in fact might almost be termed a psychological condition which the patient is unable to express in words; and because of this failure of expressive power he fears he will become worse and worse, and will eventually have to be confined in a mental hospital and will cease to be able to think at all. Our hypothesis that this must be the mental attitude of the patient to his illness is borne out by the following facts gleaned from experience:

(1) All cases of neuroses complain that they cannot remember the commencement of their illness. They will often make a vague statement that it started at such and such a time, but a very few questions soon elicit the fact that the exact date is not clearly known, the patients often complaining that they "cannot think why they are like this." They frequently state that their minds are blank. The psychological reason for these symptoms is that the origin of the illness is always in the far past and that the blanks are due to breaking of the associative train of thought, to dissociation.

(2) Experience seems to show that at the back of all sufferers' minds there is a fear that they will become like someone else who either was mad or whom they thought mad—it may be a relative, it may be a dear friend. They identify themselves with these people who have had to go to a mental hospital and be shut up because they were mad, and picture themselves in a like predicament.

(3) These hypotheses are borne out by experience in the most severe cases of psychoses, namely, those of patients in mental hospitals who

believe themselves to be sane, imagine that other people think them insane *because* they are shut up, and fear that they will become mad like other cases whom they consider to be so. This psychological attitude of the sufferer, *i.e.* the fear that he may become mad, is one cause of the difficulty in getting cases to come voluntarily for treatment. The neurotic knows that he is different from others; he is continually fighting with this knowledge. His symptoms are an attempt to explain himself to others, to tell them why he is like this. He fears insanity. This may appear a far-fetched hypothesis, but when clinical experience proves that the removal of the idea of becoming insane leads to the recovery of the patient and his adjustment to his environment, the hypothesis appears tenable until a better one is advanced. The following cases will illustrate and perhaps make this point clearer:

A man about 60 years of age who was restless at night, continually wandering about without apparent cause, complaining that he was in such intense pain in his abdomen that he could not rest, was brought to the clinic. His friends had the fear that he might do himself some harm. The history was that he had always been rather spoilt. He had had his own way both with his mother and with his wife, and with his own children. He had had no illness until about the year previous when he complained of a vague intestinal pain and eventually an operation for gall stones was performed. The pain before the operation had been called neuralgia. Owing to his attack of gall stones and his rather long period of convalescence he lost his work and he then began complaining of intense abdominal pain; no medicine relieved him. Hiding behind this symptom was the fear that he would go off his head, as a relative had done who was suffering from some vague intestinal trouble. He was assured that he would never be any more off his head than he was at present. An explanation was given of how the idea arose in his mind, with a consequent abatement of his restlessness and also a diminution of his pain. In this particular case, that of a man active all his life who suddenly ceased work, there was a good deal of muscular flabbiness with some distension of the abdomen through flatus. The flatus was the apparent physical cause on which he hung his symptoms. In other words he had 'got the wind up' both physically and psychologically, and the removal of the wind in both senses apparently completed his cure.

The second case was that of a woman, a member of whose family, namely her mother, had previously suffered from melancholia. This woman remained perfectly well till she had an attack of influenza. Following this she had difficulty in concentrating her mind on anything.

Physically she was run down and could not perform her work. She became what is usually termed melancholic, and talked about drowning herself. When first seen at the clinic she appeared miserable, answered questions only in monosyllables and said she was becoming mad. In this case it was found that she was afraid of being like her mother, and that the idea of suicide was that she would sooner be dead than shut up in the mental hospital, which was in close proximity to her home. At present she is very much improved and has returned to her work.

Suicidal tendencies are caused, I believe, in many cases, by the fear of becoming insane. The patient would sooner kill himself than become mad. This hypothesis is borne out by the fact that after this fear is explained away the patient ceases to be suicidal. Many have told me that their suicidal tendencies were caused by the fear of insanity; and certainly of the numerous so-called suicidal cases either admitted as in-patients to the mental hospital or treated as out-patients at the clinic, none up to the present, after treatment, have attempted to commit the act.

The next point for consideration is the class of case coming for treatment at the clinic. To give a list with the diagnosis of each case that has attended since the opening would be of little value, as it would simply be a list of names, and the diagnosis might in many cases be questioned. I propose therefore to divide the cases roughly and rather arbitrarily under three headings:

(1) *So-called 'functional' cases*, by which I mean cases in which no marked organic or toxic disease can be discovered.

Under this heading various forms of hysteria, neurasthenia, anxiety states, melancholia, mania, manic depressive and obsessional cases, cases of phobia and impulse are included, as the main symptom appears to be of a psychological nature, connected rather with the mental than with the physical life of the patient.

(2) *Toxic cases, e.g.* syphilitic, alcoholic, encephalitic and puerperal cases. I would include also what are called exhaustion psychoses.

(3) *Cases in which there are marked organic degenerative changes, e.g.* trauma, senile changes, various vascular lesions, diseases affecting the special senses, or other gross lesions of the nervous system.

This still leaves illnesses like epilepsy and dementia praecox unclassified, and cases of these maladies are probably found in each of the three groups already mentioned.

It is admitted that the above classification is more or less arbitrary, but I think all cases that do come for treatment at the Nervous Disorders Clinic can roughly be grouped under one of these three headings.

At the same time, it should be noted that the division between the three groups is not a hard and fast one. Thus, when a case is designated 'functional,' this merely implies that the symptoms cannot be accounted for by any physical disorder at present known, or that whatever physical disability there is does not seem sufficient to account for the symptoms manifested. The functional group naturally tends to slide into the second or toxic group, and the toxic group in the same way slides into the third group.

All these groups further present very much the same problem, that is, they are all called 'nervous'; and I think this term 'nervous' is used in much too wide a sense. To illustrate: A patient who has had a definite loss of power due to a breaking of the nerve continuity between the brain and the muscle is undoubtedly suffering from a disease or injury to the nerve, and is therefore nervous in the strict sense of the word, whereas a person who is suffering from a so-called 'nervous breakdown' may have no symptoms of nerve degeneration except a general apprehension, a fear of they know not what, and a general inability to tackle life. Such patients are told that their "nerves are out of order," whereas in this case it is only a function which is deranged. In fact any psychological departure from the normal is usually designated 'nerves.' As the nervous system is the most highly organized of any system of the human body it seems logical to suppose that its functions may be deranged either by gross changes in the body or by minute changes in the metabolism, but at the same time it is also possible that changes in the environment or influences from the environment causing acute emotion may, and perhaps do, alter physical functions. Instances are the sweat of fear or the vomiting of disgust.

I will now attempt to illustrate the three categories I have mentioned by a description of specific cases:

(1) A case of a girl who was sent to the clinic with a hand which she had not been able to open for three months. The right hand was clenched and the patient said she had no power to open it. An investigation of the case revealed that she had a very great attachment to her father. She had always been given way to and spoilt. Her father had been strict only in one way and that was with reference to her behaviour with the opposite sex. He had, so to speak, instilled into the girl's mind that the male sex, with the exception of himself, were a danger to her. It is not inferred here that this had been done deliberately or consciously, but that such was the sum total of the idea the girl had formed. The girl therefore had had no outlet for her biological feelings for the opposite

sex except her father. Her whole affection had been concentrated on this one person. No ill effects result from this until her father begins to suffer in his health, when the girl, who is in service, becomes worried because she hears that her beloved father is ill. The conflict then arising in her mind is the following: The father is not well-off, she is in service and earning money, therefore she should remain in service to help the father. But because she is in service she cannot get home to see the father, that is to say, her wishes and her ethical sense are at variance. She begins to brood, with the consequence that she does not take any interest in her amusements. She had always previously been an active and rather energetic girl. This loss of physical activity results in slight loss of appetite, and constipation. She catches what is commonly called a cold and has a certain amount of pain in her muscles, especially in that of the right arm. One day she hears that her father is worse. She cannot get permission to go and see him as her mistress is away. She feels ill. The next day when doing her work in the morning she is said to have fainted. When she comes to she cannot open her right hand. It should be noticed that the right arm is the arm she uses most in her work. The right arm also is associated in her mind unconsciously with the fact of an old relative who had a paralysis of that arm. She had hoped she would never be like this old relative. She had during her stage of physical disability also had the fear that if she were ill she would not be able to help the father. Because of her illness and her hand she is sent home. There is here a typical instance of conflict. If she remains well, she cannot see the beloved father as often as she wishes, but if she is ill she cannot assist the father because if she goes home she loses the pay for her work. It should also be noted that till she becomes physically ill, that is to say till she gets the cold, the balance of the conflict seems to be maintained, but when the physical is also affected then comes the breakdown. This patient after the first interview was able to move the fingers which had hitherto been immovable. At the second interview one was able to wash out the dirt that had collected in the clenched hand, the skin then being in a very bad state. The girl began to assist in the treatment and eventually in the course of a few months had completely recovered the use of her hand. With the exception of washing the hand and assisting the movement of the fingers which had naturally become stiff, there was no other treatment employed except psychotherapy. It was on the patient's becoming conscious of the mental mechanisms which had caused the illness that the recovery took place. This case I think illustrates that owing to her early mal-adjustment to environment

by the spoiling of her father she had not been taught to adjust herself to the difficulties of life. Her affections had concentrated unduly on her father. In this case the original cause of the trouble seems to have been entirely psychological; that is to say, the girl could not be with a loved object the whole time, and the fear of losing this loved object was so great that she could not, I can only say unconsciously, stand the conflict. There was an unconscious reason for her illness; for while she had this bad hand she could not work, and so there was nothing to keep her away from her father. She could go home because she was ill, but it was not till the slight physical disability of the cold occurred that she completely broke down. Neither the physical nor the psychological disability by itself appear sufficient to cause the breakdown and yet as she recovered in proportion as her psychological outlook improved, and as it appears in the history that her thought processes were the ones that were primarily involved, one is allowed, I think, to form the hypothesis that the primary cause was psychological and the secondary physical. It is not to be inferred from this case, which is admittedly a simple one of conversion hysteria, that all cases are so easily dealt with. It is used here merely to illustrate the first group; and as experience shows that many of these cases which have apparently resisted all other efforts do recover by psychotherapy, the hypothesis that emotional states may cause physical manifestations is tenable. Further, it is clear that if this condition had not been relieved, there would have been marked physical changes in the limb, which eventually no method except operation would have been able to remedy. Other cases could be mentioned, but time forbids. All cases are not equally successful, though from experience both among civilians and during the War, it seems that these conversion hysterics are some of the most favourable cases for psychotherapy.

(2) To illustrate the second or toxæmia group, let us take the case of a woman suffering from encephalitis lethargica. She had for several weeks been extremely ill, lying in a condition of semi-stupor. Then she began slowly to recover from her physical malady, but as her physical condition improved her mental condition showed great abnormalities. She was thought to be suicidal, for she ran to the window which she wished to throw up, as she said she heard her husband calling. She said that people came to see her, and were not allowed to do so. She was restless and required a great deal of nursing, maintaining that people were there in her room who were as a matter of fact not present. Here it was obvious that the patient was living in a condition of unreality. She was resentful of any interference. One remark she made was that she must

go away, she could not be kept there. On first seeing the patient, and bearing in mind her hallucinations, I was struck by the fact that workmen were working outside the building and had been doing a good deal of talking; that her husband had several times been to see her and, as I found by the history, had spoken once or twice to the nurse outside the door during her illness. One found one could attract the patient's attention for a moment or so, but she quickly returned to the fact that she was sure her husband was waiting to take her away. She was informed that she need not be so alarmed, that she had been ill and had been mixing up facts and unreality, that if she did not compose herself and do what she was told she would be removed to a mental hospital. From this point she appeared to recover. One was now able to demonstrate to her and to those looking after her that she was only misinterpreting external stimuli. When she said she heard her husband talking, it was the workmen talking outside her window. She heard their voices, but misinterpreted them, believing them to be that of her husband whom she so much wished to see. She said on one occasion that some woman had come to see her but was not allowed to speak to her. This was found to have been a nurse off duty, dressed in mufti, who had come up to speak to one of the other nurses. She had mentioned the patient but had not spoken directly to her. Wishing to get to the window was apparently an unconscious wish to orientate herself, to find out where she was. She afterwards admitted that this was so, and a letter from her, written after her recovery, rather emphasizes these points.

Here we have a toxæmia, affecting the cells of the brain themselves; further, we have a condition in which the person is cut off to a large extent from external stimuli because the cells are not functioning in the same way as in normal life. The consequence is that the external stimuli appear to be imperfectly recorded, but old stimuli in the way of old thoughts appear in the formation of phantasies or dreams. The dream life here is of greater force than the real, owing to the illness interfering with penetration of further stimuli, and the patient appears to live in a condition of unreality. Recovery occurs as soon as the nerve cells are so far restored that external stimuli are able to make a normal impression. The strong stimulus of pointing out to the patient the facts of the case, of making her realise that she is in a hospital and has been there a long time, and of orientating her as to the people who are dealing with her, make such an impression on what one can style her sense of reality, that the patient is able to judge between real and unreal. This patient made a complete recovery. This case again is used simply to illustrate, if

possible, the hypothesis. All cases of encephalitis, unfortunately, do not show the same good results, probably because the toxin sometimes causes such marked degeneration that the cell does not recover.

The points that are stressed in this case are:

(a) that till the toxæmia occurred the patient was well. When the external stimuli were cut off her fears about being separated from her husband reached the threshold of consciousness. It should be stated here that there were great reasons why she feared this separation from her husband, but time is too short to go into these completely.

(b) Apparently unless the patient had been treated by, so to speak, orientating her as to her position she would have been certified.

With reference to this sense of living in unreality, a case of a woman who was undoubtedly suffering from encephalitis at the mental hospital, and who also recovered and has remained perfectly well, presents an interesting phenomenon. During this patient's convalescence it happened that whenever she said she had dreamt a thing, it proved on investigation to be a real experience which she had recently been through, whereas whenever she stated that something had really happened, it turned out to be a dream! Here the normal thought processes appear actually to have been reversed. It is put forward from clinical experience of a fairly large number of cases of encephalitis with delirium, that there is always some predisposing emotional factor; in other words that delirious conditions are indicative of emotional repression, whereas in encephalitis starting with stupor the emotional factor appears to be absent.

(3) The third group. There are many organic cases in which psychotherapy can have, with our present knowledge, little curative effect. There has been an absolute break in nerve continuity and the communication of the person with external stimuli has been interfered with. Cases of aphasia are a good illustration of this point. Here, often the patient cannot understand what is said to him, nor can the medical man understand what the patient is saying. Where there is such marked disease of the brain little can be done by psychotherapy. Nevertheless psychotherapy may alleviate the emotional condition in diseases like disseminated sclerosis and tumours of the brain, and localized injuries. It will not cure the disease itself, but it often enables the patient to adjust himself to some of the disabilities arising therefrom.

This group, which I designate the organic, provides by far the greatest number of cases which are admitted to the mental hospital since the clinic has been established. It has been stated that the psychoses cannot

be treated by analysis. This may be so, but personally I doubt if the difference between a neurosis, psycho-neurosis and psychosis is not really only a matter of degree, not of essence. Our present definition of a psychosis is mainly a legal and not a medical one. I am inclined more and more to the opinion that this legal bogey has often unconsciously swayed our minds to such an extent that we behave to it in the same way as our forefathers did to the idea of witchcraft and treat it in much the same way. Witches were destroyed, imprisoned and tortured. The so-called insane have too often in the past certainly been imprisoned and perhaps even tortured (though quite unconsciously) through ignorance, and in fact will continue to be so unless the problem is approached from a psychological as well as a physiological point of view. It is Freud's genius we have to thank for giving us a line of attack that appears to have some hope of clearing up some of our problems. The paranoias, manic depressive insanity and dementia praecox groups, especially the latter, constitute a very large percentage of the so-called insane. These three groups too have been designated the true insanities. The insane show in their utterances, writings, speech etc. (Freud) irrefutable evidence of the truth of the analytic findings. This I entirely agree with from my own observations. If one examines an incoherent case by associating on the marked words in the incoherence, it will be found that these incoherent words are complex indicators and will lead back either to real or phantasy ideations in the past life of the patient, provided one can get the patient to give attention; and personally I believe that given time and patience one should always succeed in doing this. I do not mean to infer that by this alone one can always cure the patient, but as far as my own experience goes this procedure appears to have been in many cases the starting-point and has ultimately led to a recovery, and, as far as one is able to judge at present, a more permanent recovery than was obtained when this method was not used.

To illustrate, a patient who was admitted to the hospital, resistive, negative, incoherent; urinated in his bed; destroyed his clothes; at times stuporose; used to sit in a chair and appear to be picking aimlessly at nothing; impulsive at times; would not converse at all; at times his negativism was so great that he always did the opposite to what he was told. Physically, low blood-pressure; cyanosed extremities; given to frequent masturbation, and if he did not masturbate he had eneuresis. There was a history of a similar attack.

The treatment was first directed mainly to improving his general physical condition. The patient suffered from severe and chronic consti-

pation. This was treated with very little permanent result at first, that is to say that until psychological methods were employed no marked improvement took place.

Many attempts were made to influence him by suggestion and at times he appeared to improve. The suggestions made were active attempts by my colleague and myself, and passive, if one may use that term for the device of acting on his mental processes by entirely objective methods, such as altering his ward, trying the ward where the worse cases were both troublesome ones from a refractory point of view and degraded ones from a demented and dirty point of view, the object being to try to affect his obviously egoistic and narcissistic tendencies by thrusting very strong external stimuli upon him. He was always told that if he would behave himself he would be put in a better ward. The only observed effect of this was that in the worst wards he was quieter than in better ones, and this was interpreted as a clue to the fact that in the worst wards his narcissism received a reinforcement from the fact that he felt or said to himself "anyway I am better than these others" and therefore his libido was less in conflict with the ego or his inferiority feeling ego trends were less at variance with his sexual or love trends. He now, however, developed a habit, or perhaps one should say it was noticed that whenever he sat in a chair stuffed with horsehair he pulled it to pieces and played with the horsehair, throwing it all over the room, and that he always tore the mattress. At this time he was very hostile to me personally. I repeatedly pressed him by questioning him as to why he did this; usually he simply grinned, but one day he replied "Hitchy Koo." I repeatedly asked him what this made him think of, always making the suggestion that he could get well if he tried. After repeated attempts of the same nature, one day in reply to the question "what does Hitchy Koo make you think of?" he replied "horsehair, sneezing, school." Time is too short to give the further associations, but what he eventually gave as the full statement of the position was that whilst at school he was much lauded by his head master, who reminded him of his father, to whom he was always in opposition. He was afraid of his father, and also his schoolmaster. The boys at school he despised in one sense because he was cleverer than they, but envied in another because they played games which he could not manage. He was too proud to learn, but hid it under a cloak of superiority. He had been made a prefect by the head master and thus felt his responsibility. Another master who was unpopular with the boys and with him had a plot made against him by them, of which the patient was cognisant, but he would not tell the

Head, nor would he dissuade the boys, in fact he himself supplied a packet of 'Hitchy Koo Powder' which he had found, to one boy who he admitted he knew was in the plot and who he further guessed would use it on this master, which was exactly what happened. The master complained to the Head and the Head questioned the patient who denied having anything to do with the matter. This preyed on his mind and he began to justify himself and eventually repressed the episode. He was angry with the Head for lauding him as a good boy and an example. He considered the Head foolish, as he had considered his father foolish. There were various episodes to do with his father's attitude towards himself, unduly strict in some matters, especially over certain habits, enuresis being one, and undue laudation of his intellect to others. His mother absolutely spoiled him, but deferred to his father in all things. The habit of picking horsehair stopped from this date, that is from the time the whole episode was narrated, and it did not recur. The picking of the horsehair symbolized his conflict, and also was a partial compensation, that is he threw it away, which he had often wished he had done with the Hitchy Koo Powder. He improved also and began to employ himself, and though the analysis did not run too smoothly, he eventually became quite normal and was discharged. After two years a report from a relative states that he is doing well in New Zealand, and also states that everyone likes him because he is so different from other young men. This case I mention as it appeared from the clinical symptoms to be one of that group we designate dementia praecox. Of course, the diagnosis is open to doubt, as he recovered, and it may be that the term fixation hysteria would be better. One other interesting point is that on his gradual mental recovery his physical health improved with no further alteration in his medication. His grey pills and enemas were gradually discontinued and his bowels became normal. It may be argued, of course, that they did so when he got moving about and doing things, but against this is the fact that he did a good deal of moving about when he was ill, and it was not till the psychological side was clear that he remained well.

In connection with the incoherence of the insane, I could give many instances, but time forbids. All I would add is that as far as I have been able to observe, if the associations were able to be proceeded with, the symptoms improved, though there might not be complete recovery, and further the incoherent word was always a key to a real episode or phantasy in the past loaded with a strong affect.

It appears to me possible that the only difference between a psycho-neurosis and a psychosis is a physical one, and that unless we find

definite lesions, either in special sense organs (especially hearing), nerve continuity, vascular system or endocrine system, we should not use the term psychosis to imply something wholly and essentially different from a psycho-neurosis.

TREATMENT

Treatment at the clinic. As the clinic is primarily for cases with what are designated nervous disorders, that is to say, functional cases in which the most marked symptoms are those appertaining to the mental life of the patient, the principal treatment is psychotherapy. Before, however, discussing the different ways in which psychotherapy is used, a few remarks as to general treatment might be useful. General treatment resolves itself mainly into the administration of drugs or the invoking of some other department in the hospital.

As regards the former, when there is a definite physical disability, there does not appear to me to be any reason why drugs appropriate to the case should not be given, but it should be impressed on the patient for what reason the drug is administered. One explains that one hopes it may assist the recovery of health, but that it is not the only hope of the patient and will eventually become unnecessary.

Nearly all patients have a great dread of hypnotics. They are afraid themselves, or their relatives are afraid, that they will become addicted to the habit of drug-taking. Clinical experiences prove this fear to be in most cases groundless. It is better to give a drug judiciously and get rest than to exhaust the patient by withholding a hypnotic. Many medical men at the present time maintain that they have never found the drug habit induced by the proper use of hypnotics. It is only where patients use drugs themselves or on the advice of misguided persons that harm may result. If sleeplessness is due to physical pain, the cause should first be ascertained and if necessary relieved by drug treatment. No psychotherapy can be applied to a person exhausted by want of rest, and the exhaustion must first be alleviated. It matters not whether the primary cause is psychic or physical. Exhaustion means a lowered metabolism, and a consequent lessening or loss of acuity in perceiving fresh stimuli. Our stimuli reach us through our nervous system (physical nerve fibres and cells), and if our body is exhausted our nervous system suffers too. In fact, in a sense the nervous system, for the reason that it is more highly organized and complex, suffers most, therefore external stimuli received through this mechanism are less complete. To illustrate, the expression "half blind through fatigue" is true in a physical sense.

We have had, for example, a man brought into hospital so exhausted by want of food and exercise that he was in a deep stupor from exhaustion. When he woke from the stupor he appeared quite amnesic, did not know who he was or where he came from. A very short talk of about half an hour combined with food and a hot bath completely restored him. His memory returned. He was in other words blind through fatigue, in the sense that whilst in this condition of fatigue external stimuli did not enter consciousness. Hypnotic drugs therefore are prescribed in a few cases if considered necessary. Other drugs are also sometimes used, but they can generally be quickly dispensed with as psychotherapy proceeds.

It is hardly necessary to point out the use of other departments, for their utility appears so obvious. Thus, massage after hysterical contractions of long duration, electrotherapy, examination by oculists, aurists, dentists, surgeons—all are indispensable to a clinic for nervous disorders.

Psychotherapy does not ignore the patient's bodily health, but is an adjunct in assisting the medical man to make a correct diagnosis, as by means of psychotherapeutic technique information which would otherwise be hidden may be elucidated. Thus an underlying physical cause for an illness which had been designated 'hysterical' may be discovered, for often some forgotten episode in the history of the patient causes a misleading mental attitude towards the real physical disability from which he is unconsciously suffering or which he is hiding.

It has already been reported on a previous occasion how the recovery of an amnesia in a case of head injury enabled the surgeon to determine the exact spot at which to trephine.

Among the methods of psychotherapy employed at the Oxford Clinic are suggestion, explanation and persuasion. Hypnosis was employed in the past and is still occasionally used for alleviating pain and for inducing sleep; but as a general practice it has been discontinued, as suggestion, with voluntary relaxation of muscles, appears usually to have equal therapeutic value. Hypnosis, or the idea of it, usually raises great opposition in the patient's mind. Analysis appears the most useful form of psychotherapy, and, as far as my own experience goes, gives the most lasting results. I do not propose to discuss here the various disputes and contentions about the danger of psycho-analysis. A surgeon's knife in the hand of a child may be a dangerous weapon, but in the hand of a surgeon it is the instrument with which he may save life. The surgeon is not blamed because he operates in the last extremity and the operation fails. As to the respective merits of suggestion and analysis, it would

appear logical to suppose that the latter, where it can be employed, is preferable, for the same reason that a radical cure for hernia is preferable to wearing a truss.

RESULTS OF THE CLINIC

It is extremely difficult to state accurately what the results of the clinic have been, although it has now existed for eight years. The following points may be mentioned:

In the first year of the clinic there were only 33 cases of civilians treated. At this time there were a large number of pensioners in addition. During the year 1925 there were 156 civilian cases and 25 pensioners treated. It does not appear logical to suppose that unless some of the patients had reaped a certain amount of benefit the numbers attending the clinic would have increased to this extent.

From 1918 to the present date only 18 cases have been admitted to the mental hospital who had previously been attending the clinic. All but seven of these were suffering from advanced organic disease; and two of the seven have been discharged from the mental hospital, and as far as is known are doing well¹.

During the years 1911-13 the admissions to the mental hospital were 185 males and 207 females.

During the years 1923-25 the admissions to the mental hospital were 149 males and 198 females.

That is to say, there were 36 fewer males admitted in the period 1923 to 1925 and nine fewer females in the same period. The fact that the decline in male admissions is so much greater than the decline in female admissions may, I venture to suggest, be accounted for by the fact that a large number of men were treated during the War and immediately afterwards by psychotherapy as pensioners, whereas such a large number of women were not under the same treatment during this period.

There is a general tendency for the average age of admissions to increase, though this is a difficult fact to prove in short periods, as one may have an admission of several very young feeble-minded cases, which will bring the age incidence down for that year. The death rate during this latter period is lower by approximately 3 per cent., so that this factor tends to show that the numbers are not reduced through an increased death rate, and also points to the fact that improved treatment tends to diminish the death rate in spite of increase in the average age of admissions. The recovery rate, including those relieved, shows an upward

¹ See appended extract from Board of Control's Report.

rise of males of approximately 11 per cent. and for females of approximately 8 per cent. or a total rise of approximately 10 per cent. The numbers remaining of those admitted in the years 1923-25 as compared with those of 1911-13 show a decrease of 27 males and 30 females, and rather points to the fact that the treatment acts in the same way on both sexes.

In conclusion, taking into consideration the figures available from the Board of Control and available from our own statistics from the clinic and the mental hospital, there is some indication that where an out-patient clinic is run in co-operation with the mental hospital, good results are to be expected. Psychotherapy appears to be of direct therapeutic value not only in early cases, but also in cases in which the illness is more advanced, and moreover the practice of it appears to give us a wider view of the whole problem of illness, and enables us to improve the medical practice as a whole.

It can be argued that not only is psychotherapeutic technique of use to the profession, but it is also of value in training the nursing staffs of both the general and mental hospital. In this respect a co-operation in training between the two hospitals has, I think, proved of some utility.

There is no doubt that the establishment of a clinic at a general hospital does encourage patients to come for treatment at an earlier stage than they have hitherto done, and in this respect I think that the future advance of psychotherapy will enable us not only of ourselves to recognize cases and so treat them earlier, but to realize that the seeds of a great many so-called 'nervous disorders' are due to environmental conditions in the early life of the patient. If this hypothesis is correct, the subject is not only one of interest and importance to the medical profession, but also one in which the physician will be able to give advice to both parents and educationists in the bringing up of the young.

Finally, it must be remembered that the technique of psychotherapy is still in its very early infancy, and at the present time one should be guarded in taking too optimistic a view. The only thing one can say is that there appears to be enough evidence to justify us in making further efforts in this direction.

EXTRACT FROM BOARD OF CONTROL'S REPORT

DATED 6TH NOVEMBER, 1925

The number of patients chargeable either to Union or to County and Borough rate is thus seen to be now 478, which is a steep fall as compared with 663 in 1915. The average for the five years 1911-15 was 657 while the corresponding numbers on the 1st of January in each of the years 1923-25 were respectively 530, 503, and 500. The fall is not to be explained by any increase of chargeable patients under certificate in Poor Law Institutions, because their average number during the years 1911-15 was 67, while 51, 51 and 47 were their numbers on January 1st 1923-25. Expressed as ratios per 10,000 of the general population of this area the total number of certified mental cases used to be 38 in contrast with 29.6 on the 1st of last January. Highly satisfactory as this fall is, it by no means connotes a reduction in the number of cases of mental illness arising yearly in the area and requiring treatment; but, in the absence of other explanatory factors, it does suggest that intensive treatment within the hospital and the growing volume of out-patient treatment of mental cases at the Radcliffe Infirmary are making their effect felt.

DISCUSSION ON DR GOOD'S PAPER

DR MAPOTHER said: I should like to express my admiration of the work by Dr Good upon which his paper is based, and secondly to apologize to him in advance. I shall ask him to remember that I have only a few minutes to define profound disagreement with the conclusions stated and the impression left by his paper. I realize that probably some differences between us are in emphasis and in our perspective of various factors. But I have to stress differences as briefly, clearly and forcibly as I can, so I propose to enliven these proceedings by calling his paper a public danger.

My essential grievance against Dr Good is the extent of his satisfaction with the conditions under which he has done excellent pioneer work and with his results; this satisfaction is doubtless due to the very enthusiasm that has made his work possible.

This is a meeting for ascertaining facts not for propaganda and above all I want to keep away from politics. But I think it is fairly obvious to every one that exaggeration at this moment of the extent to which out-patient departments can be an adequate substitute for expensive clinics is a public danger and it is in this sense I use the term. I feel it so strongly, that I have mainly foregone constructive statement in favour of criticism.

Before going further I should like to present my credentials. I do not see out-patients myself at the Maudsley, which is the largest psychological out-patient department in this country, but I think I can in some measure speak as the mouthpiece of my colleagues. Perhaps I enjoy some of the proverbial advantages of the onlooker and my view is more impersonal and collective than that of any one colleague could be.

I also have an out-patient department at King's College Hospital for which I am personally responsible.

In the last eighteen months I have seen outside the hospital and practically as out-patients three hundred cases of neurosis arising during the War. Most of them have had much treatment at the hospitals and out-patient clinics of the Ministry of Pensions. Admittedly they are not typical results; they are a sample of the failures and relapses but many do point a moral and afford a warning, particularly to me because I had already seen several thousands of war neurotics in four hospitals during two previous periods—as soldiers and as pensioners. I had treated some hundreds myself and seen many more treated by colleagues.

I have also visited clinics in seven European countries and tried to ascertain the facts about their policlinics as far as possible. These differ greatly in methods and purposes, and it might be interesting to go into that but impossible in the time I have.

I am sure that the chief factor determining the views of all of us who join in discussion to-night, *including myself*, will be appreciation of our own achievements.

We shall all resemble the traditional cobbler with his view that there is nothing like leather and it will be possible to acquit us all of wanting to profit by a secret monopoly.

And so without mock modesty I am going to base my remarks largely on the experience of the Maudsley out-patient department and start with a small dose of figures.

During next week the Maudsley will complete its fourth year since re-opening and during that time just over 4000 different men, women and children have come to the out-patient department.

Disposal fell under three main heads:

Advice without treatment, just one-third; admission to the wards, well over one-third; continued treatment as out-patients, much less than one-third.

I know the topic of to-night's discussion is treatment as out-patients, but I must ask leave to discuss disposal under the other two headings,

because I want to emphasize the principle that *out-patient departments are indispensable, but their main function is not and cannot be continued treatment.*

This view of course is quite familiar and has been forcibly expressed by others, *e.g.* by Dr Thom as Director of the Out-patient Department at the Boston Psychopathic Clinic. Shortage of qualified staff would render continued treatment of such numbers as attend the Maudsley impossible if they were all suitable for psychotherapy, and the same objection would apply more strongly elsewhere since probably no other clinic yet started in England enjoys equal advantages in staffing.

The problem of disposal in one of the three ways mentioned, by advice, admission without certification or by continued treatment must face all psychological out-patient departments alike and most in similar degree. The material reaching various clinics is apt to seem different rather because it is looked at with different eyes than from its real nature—unless rigid selection be exercised in advance.

I agree with Dr Good that if you attach your out-patient department to a mental hospital for the certified, only advanced cases will attend. This does not apply to such a hospital as the Maudsley. Patients with advanced chronic and intense recent psychosis find their way there but so do cases of the mildest neurosis and even organic disease. Exactly the same variations are seen as in my department at King's College Hospital and presumably as at Dr Good's clinic. Dr Golla tells me that the out-patients at the Maida Vale Hospital include a larger number of organic cases, but the great mass of functional material there is made up of the same ingredients as at the Maudsley with slight difference in their proportions. One of the morals of this resemblance in the material and in the problems of different clinics is the need, in such a town as London, for close co-operation and reciprocity.

Returning to the question of the three primary modes of disposal, the first group ("advised but not treated") comprises cases where such disposal is unsatisfactory and those where it is relatively satisfactory. The unsatisfactory sub-group at the Maudsley includes cases that are too chronic, those fit for ward treatment (and this alone) but unwilling, and non-Londoners that cannot pay. The relatively satisfactory sub-group includes cases where a report is sent to the patient's doctor containing results of laboratory investigations, or an expert opinion as to diagnosis, prognosis or treatment. It also includes cases where treatment at a general hospital is recommended or at some other institution for mental troubles. This consultant function is of great value and here the work of the

hospital almoner and co-operation with social organizations are most important.

The second function of a mental policlinic should be to select those needing in-patient treatment without certification. It would be impossible for a voluntary hospital such as the Maudsley to admit patients to its wards upon the recommendation of general practitioners, without turning the place into a mixture of chaos and a clearing house. But the wards of such a hospital should be readily available to experts conducting out-patient departments elsewhere. With all respect to Dr Good if they are not so available and especially if the only alternative is certification, there is a great temptation and a risk that out-patient treatment will be carried on in many cases where it is utterly wrong from the first or has become so.

Personally I am entirely opposed to the idea that voluntary clinics for in-patients, adequately provided as to staff, structure, and highly specialized arrangements for treatment, occupation and recreation, can be indefinitely multiplied, *e.g.* that one can be created at each voluntary hospital in London. There might be room and money for three or four; to attempt the establishment of more in the near future would inevitably result in the provision of numerous inferior substitutes with limitations that would vastly reduce their usefulness. But multiplication of out-patient departments is much more possible, if restricted to their proper sphere, and this arrangement would solve the difficulties that might arise from distance if out-patient attendance were only possible at the hospitals providing beds. Co-operation between various clinics is of course also possible in virtue of a deliberate specialization of function. At the Maudsley we gratefully avail ourselves of the help of Bethlem and the Middlesex Hospital for non-Londoners needing ward treatment, and of the Tavistock Clinic and the Institute of Psycho-analysis for special types of out-patient.

Everyone will agree with Dr Good as to the need for a close association of the mental out-patient clinic with a general hospital. At the Maudsley it is met by the fact that King's College Hospital is just across the road and several of their staff are our consultant specialists. Where such arrangements are impossible, I agree that the ideal is a properly staffed and equipped department at the General Hospital. It must be admitted that at present, most of them are thoroughly unsatisfactory.

I think probably the best arrangement as a rule would be that recently instituted at Guy's—joint sessions of a neurologist and psychologist.

But no doubt there would be many cases where one man might combine the rôles as Dr Good does; this is customary on the Continent.

After a very long digression on the other activities which constitute the functions of an out-patient department in respect of a large majority of those attending, I pass at last to that which is really the topic of this evening's discussion, viz. continued treatment. As a start I wish to state some figures concerning cases under this heading registered during the first three years at the Maudsley. Practically all cases that attended more than twice without being eventually admitted are included; two visits are reckoned necessary for diagnosis. It would be useless to include cases registered in the fourth year since so large a proportion of those coming in its latter part would still be undecided.

In the first *three* years the total cases registered were nearly 2900, those receiving continued out-patient treatment were only a little over 600. This proportion was much lower at first than recently because the pressure on staff was greater and on beds less than now. Of those treated to a conclusion 36 per cent. were not improved, 47 per cent. improved, 17 per cent. recovered. I might go on to discuss the meaning of these terms. It would be quite useless because the figures serve no purpose except to expose the fallacy of these and similar statistics.

On the one hand, the low ratio of recovery is due to the fact that those selected for out-patient treatment are mostly drawn from what remains after the cream has been skimmed (in the belief that ward treatment is the due of most hopeful cases). Almost the only persons likely to recover completely that are retained as out-patients are those that *must* keep on working, that live just out of London, or are unwilling to come in.

On the other hand, figures of the results from continued out-patient treatment can easily be improved up to a limit set by one's skill in prognosis. This is done by dismissing to the 'merely advised' class all whose outcome is doubtful.

I want to emphasize that I believe in a legitimate field for out-patient treatment. To a large extent it is directed to the chronic and does not look for cure. Occasional supervision and direction will enable many to avoid certification who would otherwise be segregated; the racial gain is perhaps doubtful. Attendance at a clinic would enable many convalescents to be discharged earlier from mental hospitals of all sorts. None of this is cure.

There is a pretty large group where out-patient treatment is the method of choice. Avoiding labels I should say it consists mostly of cases in whom a preference for dependence rather than effort is a large factor,

whose symptoms are largely a refuge from life. It hardly matters whether this attitude is verbally formulated to himself by the patient or not, *i.e.* whether it be 'conscious' or 'unconscious.' If 'unconscious,' elucidation of the real genesis of symptoms and tactful unveiling may often help. In either case gentle encouragement or vigorous 'gingering up' may be most useful. Many such patients may eventually be taught to adopt a higher goal than physical or mental invalidism.

Many of the chronic pensioners illustrate the creation of neurosis by providing a counter-incentive to effort. One of the commonest histories is (i) fairly hard work for years after discharge from the army with small pension, (ii) admission to hospital and never a stroke since, (iii) obvious fitness for employment now but unconquerable fixation in a habit of living by patter learnt in hospital rather than by work. Out-patient treatment was hardly better so long as it was associated with reduction of pension on improvement. But in the case of the analogous civilians out-patient treatment has no material incentives, while ward treatment in such hospitals as the Maudsley has attractions for many.

Argument as to out-patient treatment of neuroses and psychoses resolves itself mainly into the old controversy about the efficacy of unassisted psychotherapy in various forms. As to this practical issue there are devastating torrents of assertion and no observations with controls such as would give assertions scientific value. Corresponding theoretically is a difference as to the degree in which mental disorder is the result on the one hand of the continuing and continuous operation of some factor in the unconscious mind, or on the other hand the result of (a) more grossly physical factors, (b) innate tendencies and anomalies of changes usual with certain physiological events and epochs, or (c) the residual effect of a psychic trauma which has established a habit or other disposition that persists independently of the initial cause. Like the preacher I propose to look these difficulties straight in the face and pass on.

Personally I think that nearly every mental case is due to a complex of causes belonging to each distinguishable class, that its form is not exactly correlated to any one cause but is a resultant, and this resultant is an intermixture in varying measure of all the standard anomalies of reaction that can be artificially classified.

Hence I am sceptical that psychotherapy alone or any other measure alone will cure most cases whatever the form. I have had experience of a few where elucidation of something secret or forgotten or misunderstood sufficed to clear up symptoms in anxiety and obsessional states. But I have heard much and seen little of these triumphs though I saw

thousands of war neuroses in which they were reputed common. Personally I hold views less flattering to the psychotherapist concerning the limitation of our powers in cases where there is such evidence of current emotion as cannot be simulated. These views hold whether the emotion be anxiety, depression, resentment or exaltation.

In such active cases I think hospital treatment or the equivalent is nearly always advisable; the doctor's work consists largely of the intelligent direction of nursing, and time is of the essence of the contract. This is no reproach to psychiatry; it is all true of the treatment of typhoid, tuberculosis or heart disease and *our* results are rather better.

I believe of course in psychotherapy as *one* of the essentials in most cases but often it is treatment of secondary symptoms and complications.

Just because I believe in psychogenesis in the widest sense, it appears to me obviously necessary if possible to get the patient away from the circumstances that are often the main precipitating cause and still more often secondary factors maintaining complications. Should the irritable patient be left wrecking his own temper and the patience of his wife by daily quarrels? Should the shy depressed patient be forced to continue the daily round that has become a daily torment? Is occasional therapeutic talk an efficient substitute for cessation of these secondary strains? I have heard it said a patient should be treated in the environment to which he needs to adjust. It seems as logical as to insist on treating dyspepsia with a diet of pork. It is a universal principle in medicine that treatment involves relief from stresses in order to build a reserve that will make the same stresses ultimately bearable. It is true of diabetes, heart disease, tuberculosis and truest of emotional disorders.

I entirely agree with what Dr Good says regarding use of sedatives but effective use frequently necessitates hospital.

I now want to get back to Dr Good's main conclusions and to the sting in the tail of my remarks.

He advances several propositions.

(1) He says that even *very severe* cases of mental abnormality will and do improve as out-patients providing there is no marked organic disability.

The answer is that they may. It is another question whether the proportion that *does* improve, justifies the harm that may be done in recent cases. It is possible that the risk is sometimes worth taking if certification is the alternative, but the risk would be unjustifiable if treatment in a voluntary clinic were available.

Dr Good states that only seven functional cases have gone from his

clinic to the mental hospital in eight years. Of these *two* were recoverable. Does Dr Good never see cases of ordinary melancholia, the commonest severe psychosis, or does he cure them all? If so, how? To say such cases do not need hospital treatment seems tantamount to saying that among the poor they do best on no treatment at all. Everyone but Dr Good is agreed that in a large proportion any sort of active psychotherapy is harmful and proper nursing at home is impossible. What does Dr Good do to produce such statistics?

It does not appear that he works in any mysterious way his wonders to perform.

He speaks of psycho-analysis of his out-patients. The conditions of his work and the nature of the cases he records seem to indicate that he does not use the word in the restricted sense in which alone it means anything beyond the elucidation undertaken by every intelligent modern psychiatrist who denies himself the title of psycho-analyst.

I find it significant that of four cases supposed to illustrate the possibilities of psychotherapy in out-patients, one was a case of encephalitis confined to bed at home or in the wards of a general hospital and another was in the wards of the mental hospital. We are not told the evidence of encephalitis or the stage of it, but I presume it was an early acute stage since hallucinatory delirium is very rare except then. If so, what is the achievement? Encephalitics if they do not die always do get over the delirium. I presume Dr Good does not claim to have averted Parkinsonism by psychotherapy.

Incidentally I find treatment included threatening the girl with the mental hospital, which seems difficult to reconcile with Dr Good's previous assertion that fear of this is the one universal pathogenic factor. Lastly Dr Good is too experienced a psychiatrist to question that cure by pointing out the misinterpretations in a case of toxic confusion with illusions is so exceptional as to suggest the post and propter fallacy.

In the middle of the long account of psychotherapy of the schizoid case is inserted the simple sentence "There was a history of a similar attack" from which presumably he had recovered without any such treatment. We have all seen such cases.

(2) Dr Good's second proposition is this.

If functional cases require admission as in-patients their mental disability is usually of such degree that they are only fit to be treated in a hospital specially equipped to deal with advanced cases of mental derangement, namely a mental hospital, *i.e.* under certificate at a public asylum.

I cannot imagine any sentence about psychiatry to which I should object as strongly as this. There are thousands of mental cases in which ward treatment would be preferable (either on account of symptoms or aetiology) that are quite uncertifiable. I should like to ask Dr Good to remember *all* the cases of anxiety neurosis of the War he had at Ashurst and to say whether they could be divided into two groups—equally well treated as out-patients and in an asylum with the chronic insane respectively. Finally Dr Good decides that in most severe mental disorders in-patient treatment is contra-indicated, and comes to the conclusion that the only future development of in-patient treatment which we need is the power to retain certifiable cases of severe organic disease in a general hospital. That was what led me to call his paper a public danger.

Just a few words about Dr Good's statistics and the appended statement of the Board of Control. As to reduced admissions, has he enquired whether reduced male rate is peculiar to the Oxford district? I think not. Lest we forget, I would remind him that nearly 800,000 men from the British Isles, of the ages most fertile in insanity, were killed in the War. So we might owe the reduction of potential patients to the German army. The same statistical fallacy was disregarded in a recent paper by Prof. Robertson ascribing the fall in G.P.I. to arsenical treatment.

Secondly, a large number of neurotics who first broke down in the War are still subsidized by the Ministry of Pensions in a way that helps to prevent further breakdown or at least helps to keep them out of asylums.

As to the rate of those discharged (including the relieved) at Dr Good's mental hospital, this is of course in his own hands. Cures abound for the therapeutic optimist.

I think we have as yet no prophylaxis, physical or mental, capable of influencing the incipient stages of serious psychosis in such a proportion of cases as materially to influence the admission rate to asylums. I congratulate Dr Good on his enthusiasm about prevention and treatment in the present. If he objects to my scepticism I hope he will credit me with some feeling about investigation and the future.

DR CRICHTON MILLER: Mr President, may I begin by expressing my thanks to the Committee and congratulations to myself that I have been asked to speak after Dr Mapother and not before. Dr Mapother's criticisms of Dr Good's paper suggest to me a possible reason why psychotherapeutic treatment as carried out by his colleagues at the Maudsley Hospital is not more successful. Indeed I cannot imagine successful

psychotherapy being conducted under a superintendent whose attitude is so frankly philistine. I differ from Dr Mapother entirely in his conclusion that continuous out-patient treatment is useless or impossible. I believe it fulfils an important function for a certain number of cases. On the other hand, I agree very heartily with him when he claims that the great majority of mental disorders are the outcome of a complex and many-sided aetiology.

While I agree in the main with Dr Good's paper and am glad of this opportunity of supporting his views, there are two points that I should like to refer to. Dr Good describes the fear of insanity as an almost constant factor in his clinical cases and describes the value of reassurance. My experience does not confirm this. A considerable proportion of the patients who express their fear of insanity are hoping for insanity and the safe retreat of the asylum. It is too simple to suppose that they are all going to be satisfied by an authoritative reassurance that they will never be more insane than they are at present.

The other point that I would like to refer to is this. Speaking of dementia praecox, Dr Good says: "Of course the diagnosis is open to doubt as the patient recovered." May I ask that in the subsequent discussion some of the eminent psychiatrists present will tell us the truth about dementia praecox. If dementia praecox is ex-hypothesi incurable, it is no use any of us trying to cure it and in that case we should welcome an authorized label for cases that do recover.

Sociologically we can divide the population roughly into three classes, the adjusted, the mal-adjusted and the unadjusted. The adjusted need no physician. All that need be said of them—or shall we say us?—is that we are not as numerous as we like to believe. The unadjusted are segregated, primarily in the interests of society and secondarily in their own interests. If they are considered responsible for their failure of adjustment the law deals with them, and if they are not thought to be responsible the doctor deals with them. Between these two groups of adjusted and unadjusted lies the vast and vague hinterland of mal-adjustment. Our business is to deal with this (a) in the hope of attaining adjustment, (b) with the object of preventing deterioration and the possible need for segregation. This then is our work, both constructive and conservative, in the field of mal-adjustment. What are our methods? The most important answer to this question is the statement of what is not our method, to wit, the panacea. Most departments of medicine have suffered or do suffer from the panacea merchant. In the face of this protean problem of the mal-adjusted personality the panacea is a very

real danger and yet we all tend to approach the mal-adjusted from the same angle every time. One man offers reassurance and another analysis, one suggestion and another persuasion, one organo-therapy and another vaccines, but for the most part it is a case of one therapist, one therapy. The disadvantage is two-fold, (a) poorer results and (b) loss of time.

At the Tavistock Clinic we make it our aim to husband the time and energy of the psychotherapist by all means that seem helpful. For instance if a case of mild depression can be cleared up with the simple administration of thyroid, we regard it as sheer waste that a psychotherapist should spend his time upon it. Probably you all agree with me and yet there can be no doubt that many excellent practitioners spend time on psychological treatment of similar cases that yield to this form of treatment. This is the great example of the therapeutic myopia that we have to overcome. Indeed I would go the length of saying that the better the psychotherapist is at his own work, the greater the need to safeguard his time and energy. Therefore he should have the co-operation of a physician who looks primarily at the organic side. I can think of two cases that died of pernicious anaemia soon after completing courses of psychological treatment. I asked myself how far we can expect the mal-adjusted to respond to psychotherapy in the presence of a metabolic failure such as this must have been.

In a recent discussion on psychological treatment in another place Dr T. A. Ross of the Cassel Hospital said (quite gratuitously, by the way, for I had made no reference to the subject) that I would like to give all our patients treatment by endocrines. This is not correct. What I should like would be to give thyroid treatment and perhaps pituitary injections to those of Dr Ross's patients who need them and are not getting them. I should like to do it, not because I doubt their recovery. I am prepared to believe that Dr Ross's gift of healing is capable of curing the sub-thyroidic without thyroid. My desire to see these patients treated by organotherapy is produced by the knowledge that I have scores of patients who cannot be so simply cured but who would be immensely benefited by Dr Ross's time and energy thus released.

Dr Rickman will tell us of the value of psycho-analysis (I use the word, as I always use it, in the strict and narrow sense) but I should like to apply the same remarks to it. Surely when we are dealing with a form of treatment that may call for two years of labour and effort on the part of a highly skilled physician our first business should be to make certain that the patient is (a) physiologically capable of the best possible response and (b) unlikely to solve his own conflicts without such help.

At a medical meeting I once heard a physician who conducts a home for 'neurasthenics' reveal his secret. It was this, "Vet them well but never treat them." I do not propose to discuss the second part of this formula because it is obvious that it may be a very advantageous formula for some physicians to hold. But with regard to the first part I am anxious to lay down what at the Tavistock Clinic we consider 'a sound vetting.' We are not satisfied with the ordinary stethoscope examination, and rough neurological tests, nor by merely examining the urine for sugar and albumen. As a universal routine a differential blood count is done on every case, urine is tested for indican, blood sugar tests are frequently made and a variety of bacteriological investigations as called for. We would like to be able to estimate the basal metabolic rate as a routine measure but unfortunately owing to the lack of beds this cannot be done. Experience gained in the nursing home with which I am connected convinces me that this test would be a most valuable routine measure.

A few days ago I had an example of the curiously low standard of metabolic efficiency which physicians are prepared to accept. A big lout of 18 was sent to the Tavistock Clinic for 'treatment by suggestion.' It was claimed that in the last two years he had attended as an in-patient or out-patient some twenty London hospitals and dispensaries. His systolic blood-pressure was 80. It seems to me that twenty London hospitals between them might have tackled the problem of hypopiesis before relegating this patient to the waste-paper basket for 'suggestion.' The therapeutic conception which I have tried to outline needs team work and team work is good. It prevents us from falling into a groove. The sceptical pathologist is surprised to see results from psychotherapy. The psychotherapist with a narrow vision is surprised to see cases recovering without his help and what is perhaps more important, prevented from wasting his time on cases that are organically recoverable. But our therapeutic outlook being, as I said at the beginning, both constructive and conservative, it involves the necessity of providing for some of the mal-adjusted a modified environment. We have necessarily to recognize that no methods of ours, be they analytical, suggestive or anything else, will help some of the mal-adjusted to make a successful adjustment to the environment in which they have broken down. For them a modified and more appropriate environment must be found or else we must anticipate their drifting into complete non-adjustment. Hence it follows that to deal adequately with this problem of the mal-adjusted we must have at our command the whole gamut of therapeutic resource,

both medical and social, from the autogenous vaccine of the bacteriologist to the emigration scheme of the Salvation Army.

DR RICKMAN: Mr Chairman, Ladies and Gentlemen. Your Committee decided that an 'orthodox psycho-analyst' should contribute a short paper to the discussion and I have been asked to undertake the duty. I suppose that you all know exactly what I am going to say!

The investigation of mental disease differs in no essential way from the investigation of physical disease; two paths of research lie before the student, a study of the disease in minute detail or a study of the correlations of disease incidence and the details of factors in heredity and environment. Each method of research employs special techniques or instruments. In a physical disease such as tuberculosis the minute investigation of the disease process requires the instruments of the pathological laboratory, and the other line of investigation invokes the aid of mathematics. I wish to elaborate this for a moment in regard to tuberculosis as a clear illustration of features that often appear to be obscure in relation to mental disease. A thorough investigation into the incidence of pulmonary tuberculosis in a tuberculosis dispensary would include such questions as conjugal contact, *i.e.* is the proportion of infected married men in the population whose wives have tuberculosis greater than the proportion of unmarried infected men? This can be answered satisfactorily by thorough dispensary examinations, *i.e.* by ordinary clinical means, and for such things dispensary work is a valuable source of knowledge. It has nothing whatever to do with, say, detailed knowledge of the behaviour of the specific bacillus, or with the patients' reaction by giant cell formation or antisera or what not. These latter investigations are not or were not originally possible in a dispensary but only in a laboratory. We can carry the analogy over to mental and nervous disease. The ordinary mental out-patient clinic is a suitable place for the investigation of the correlations of, say, anxiety neurosis in the wife and *ejaculatio praecox* in the husband without deeper knowledge of the chemical or psychical processes involved in the disease itself. What is required of the investigation in the dispensary and clinic is a capacity to diagnose the conditions and use the data accurately. The value of research in this direction is not to be minimized provided that the elements taken into the correlation statistics are pure; this is, as we know, a difficult matter to establish.

The deep investigation of neuroses, psycho-neuroses, and psychoses in an out-patient clinic is just as possible as in a hospital—or more so—provided that an adequate instrument of investigation is provided and

adequately trained psychopathologists are available to use it. No instrument of investigation into the mind has been yet discovered to rival the classical technique of psycho-analysis. Indeed practically the entire body of psychopathological knowledge now in clinical use was formed on data observed in the classical psycho-analytical technique, viz. dream and symptom formation, the libido theory, the rôle of the super-ego, and last and most important of all transference, resistance and regression. The investigation of the unconscious mind by analysis is the homologue of the pathologist's laboratory, and at the same time the supreme instrument of diagnosis and therapy.

Turning to treatment: there is no essential difference between the methods employed in approaching mental disease and physical disease—the type of treatment selected in both cases depends on knowledge of pathology. Psycho-analysts hold that the symptom itself is an attempt on the part of the patient at self-cure; it is a state of equilibrium more or less stable between the libidinal impulses striving for gratification and the repressing forces of ego and super-ego together with the weakness or inadaptability of the ego. Any method of treatment to be successful has to replace the condition of compromise or unstable equilibrium—which is the symptom—by a more stable one in which the ego acquires more knowledge and experience of the component and combined instinct impulses and becomes less blind in its handling of them, *i.e.* the ego must acquire capacity for adaptation in place of repression. Clinical experience tells us, by the way, that this beneficent process or re-education meets with a phenomenal amount of resistance on the part of the patient, his relatives and other advisers. Put in other terms, the therapy does not depend on substituting one idea for another but one mode of instinctive behaviour for another—a vastly more difficult and thorough procedure. Clinical experience also shows that the procedure of hypnosis, suggestion and persuasion do not in fact make this substitution of one instinctive behaviour for another because they do not and cannot get to the source of or remove the resistances, that is to say, they can only mitigate the symptom complex for a time by a change in its type. Analysis of patients who have been through other forms of psychotherapy shows that usually their effect is to weaken the ego against its instinctual impulses and increase the force of blind repression (the super-ego); this may sometimes be justified as a temporary expedient but it is definitely a dereliction of psychopathology. Holding these views I may be asked if I have any use for a mental out-patient clinic which does not employ psycho-analysis. I have, and I consider its uses three-fold: (1) to afford an opportunity for

studying correlations of the general type before mentioned, (2) to teach the superficial clinical features and psychopathology of nervous disorders to students and practitioners and last, but not least, (3) to serve as a sorting room so that cases may be sent (*a*) to clinics where psychotherapy is conducted on lines according with modern knowledge of psychotherapy¹, (*b*) to asylums when certification is necessary (this is a disagreeable service rendered to wavering practitioners), (*c*) to convalescent homes and other places where, though no thorough knowledge of psychopathology is used in the treatment, the patients, more or less uninterrupted by their relatives and friends, are given a chance to work out their self-cure, *i.e.* exchange a symptom for an inhibition².

But still, you may ask, are there no modifications of the psycho-analytical technique so highly vaunted? In general medicine a practitioner departs from the usual course of therapy if he finds the pathological conditions are unusual. In psycho-analysis I know of three modifications which are designed to meet the unusual type of case: Frau Melanie Klein's 'play technique' for dealing with the infantile ego, *i.e.* in the analysis of young children, Pierce Clark's 'phantasy technique' for dealing with narcissistic cases, and Ferenczi's 'active technique' for dealing with particularly resistant egos. To be sure others will be devised.

There are modifications at which general medical practice looks askance, namely, modifications of treatment called for not by unusual pathological condition but extraneous reasons. In psychotherapy these reasons usually resolve themselves into two simple ones: the patient has

[The footnotes were not read at the Meeting owing to the ten minute rule.]

¹ To my knowledge there are in the world at the present time three mental out-patient clinics where treatment is based solely on considerations of pathology: one in Berlin, one in Vienna and one in London. There may also be one in Moscow and there will be one in New York in the near future. There is a uniformity about these widely separated institutions that compares with the uniformity of general surgical practice as opposed, shall we say, to general opotherapeutic practice; a patient with a pain in the right iliac fossa, abdominal rigidity, furred tongue, temperature, rapid pulse and local tenderness would receive the same treatment in any four cities of the world, not because Americans, English, Germans or Russians are slaves to medical orthodoxy and unimaginative, but because in spite of a not inconsiderable impulse to ambition and rivalry which would lead them to look for new aetiologies and new modes of dealing with them, they study the disease processes in the same way.

In psychotherapy in most cases it is quite another story. Apart from psycho-analysis, when psychotheraputists happen to do much the same thing, it is as often as not for quite different reasons, *i.e.* based on quite different notions of psychopathology.

² It is often found in practice that the less ambitious gestures in psychotherapy (hypnosis, persuasion, etc.) can be carried out at the out-patient clinic where the patient first comes for consultation.

not sufficient time to be treated or the physician has not sufficient time to treat him. For my part I cannot see that much useful purpose can be served in a scientific society by discussing modifications of technique where extraneous (*i.e.* not psychopathological) reasons guide the physician. Every patient will treat himself in his own way if he can, and every physician will treat his patients according to his own id and super-ego adjustment unless he has some discipline such as psychopathology affords to guide him. If you ask me to choose between hypnosis or waking suggestion or a *placebo* in a bottle I shall reply, "It doesn't matter, so long as the physician knows that he's only groping in the dark, and the patients will not mind unless they are really groping for the light."

Where extraneous reasons do force a compromise the following considerations have to be borne in mind—the neurotic disease will not be cured till its origin, which lies concealed in the infantile amnesia and in character abnormalities, has been disclosed to the patient's conscious mind. But a shrewd physician who knows his psychopathology will be able to guess some of the conflicts present in the mind. If he communicates his guess tactfully and with confidence the patient will do one of two things, he will either break off the treatment (with or without an assertion that he is cured or is better) or else he will continue the treatment and exchanging his old neurosis for an unresolved transference become dependent on his physician and on authority. In the psycho-analytical terminology he will not have thereby solved his Oedipus complex but will remain in the infantile condition he was in prior to his early evasion of it. I suppose we must be content if a second best psychotherapy mitigates the sufferings and gives relief even though it returns the patients to Society to fight their battles with the mental equipment of the dependent but cheerful child.

Those who organize the mental clinics of the future may choose between making them first aid stations or fully equipped surgical hospitals, to take another analogy; the latter (by that I mean of course psycho-analytic clinics) will demand much more time, effort and training but the work will be more thorough, and the results will be more lasting; the former will give quicker results, will cover a wider range of the population and will need less fully trained men. In the transitional period both will be required. The training of personnel will have to be done in the more thorough establishment, which will be the spear head of progress in research, technique and education.

A word about the so-called physical complications. (I am assuming

that the patients have been examined and that disease such as G.P.I., post-encephalitic lethargica, cerebral syphilis, etc., are excluded from the psychotherapeutic clinic.) Physical illness plays a secondary part in the aetiology of the psycho-neurosis, but may figure prominently among the symptoms. I will put a question to those who say that they always 'clear up' the physical trouble before turning to the mental and ask them how they explain the fact that patients have allowed their own physical condition to deteriorate while at the same time complaining often for years of aches and pains. The answer to my mind is that the bodily disorder is employed as a screen which serves the purpose of concealing secondary epinosic gain and primary epinosic gain (which often is the need for punishment). To attempt to abolish the physical disorder without investigating its psychical utilization *in vivo* so to speak is to lose a fine opportunity for studying the depths of the patient's mind. In regard to other illnesses the transference-neurosis is an insurance against intercurrent disease of a remarkably effective kind, those who tamper with the transference by physical therapy before psychotherapy begins lose the golden moments which the early hours of treatment or investigation afford.

This brings us to investigation again and me to my conclusion: investigation and treatment depend on the employment of psychopathology to the fullest extent of our knowledge. It is a grave responsibility to let any other consideration than pathology guide the selection of treatment between analysis, suggestion or what not. Happily the nature of neurotic disease is such that it can be thoroughly investigated and adequately treated at an out-patient clinic.

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DR BERNARD HART, from the Chair, made a brief summary of the discussion and was followed by Dr T. A. Ross, Dr Stoddart, Dr Culpin, Dr Potts, Dr Hardcastle, Dr Edward Glover, Dr Dillon and Dr Dawson.

DR D. N. HARDCASTLE thought the discussion had been very interesting and, while agreeing with many points in Dr Rickman's paper, felt that the standard of treatment had been set rather too high, the percentage of cases suitable for psycho-analysis or any form of profound psychological treatment among those attending an out-patient department being in his experience necessarily low, owing to the kind of patient, frequently of a poor type mentally and physically, unable to make much effort to adapt themselves to their environment, or else suffering from exhaustion, the result of toxic absorption or infection.

Dr Hardcastle felt that the greatest scope of the mental out-patient department lay in attempting to bridge the gap for the bulk of the patients rather than aiming at a cure for the few. To this end all forms of treatment should be utilized, drugs, change of environment, general reassurance or suggestion treatment. He did not share Dr Glover's dread of the transference persisting after the treatment, so long as the physician knows what he is doing, for he had not found that it had materially hindered the patients' independence nor made them patients for life.

He was rather amazed that no one had mentioned the social worker in the London out-patient departments. They enjoyed the services of one at Bethlem—after the first visit of a new patient she visits the home and makes a point of interviewing some relative of the patient and extracting as clear a life and family history as possible, together with a picture of the home conditions. With very little imagination the physician can from this typed report picture the patient in his home environment, a point of course of the greatest value in deciding the necessary form of treatment for the particular case.

The social worker, who is a link between the patient's home and the hospital, undertakes no form of treatment; in his opinion she is a very valuable adjunct to any mental out-patient department.

DR DAWSON wished to correct Dr Crichton-Miller's suggestion that Dr Mapother discouraged his staff by his summing-up of psychotherapeutic results in the out-patient department at the Maudsley Hospital. The medical staff at the Maudsley were in no need of any sympathy. As a matter of fact, the figures on the chart displayed by Dr Mapother were compiled from the spontaneous and independent verdicts of the members of the medical staff upon their own work. Representatives of many schools of thought were to be found amongst the doctors at the Maudsley Hospital, and Dr Miller might be reassured that even ductless gland therapy was not overlooked.

As regards Dr Good's paper, there were a number of points which the members would like to discuss did time permit. Dr Dawson regretted that Dr Good had not included re-education among his psychotherapeutic methods, using the term to include the social rehabilitation of poorly adjusted individuals. Dr Good had made no mention of social service and of the invaluable work which might be performed by a lady almoner in assisting the physicians by the collecting of data and lay after-care. Dr Dawson had also hoped that Dr Good would speak about the attendance of children at the clinic and about preventive measures and mental hygiene.

As regards the types of case attending an out-patient department for mental disorders, it was of interest to note that at the Phipps Institute, Baltimore, U.S.A., with a steadily increasing turnover, there had been a gradual drop in the percentage of psychotics and certifiable cases, and a greater number of neurotics, social misfits and children. Perhaps this was due to the close liaison existing between the clinic and numerous social and welfare organizations.

Dr Good thanked the members of the Medical Section for the way in which they discussed his paper. He felt that the paper was rather inadequate, and it was obvious that he did not express his views as clearly as he might have done. So many members had spoken that he found it difficult at that hour in the evening to take each of the points raised by different members individually.

Replying to Dr Mapother's remarks on the paper, he was not surprised that he had rather severe criticisms from him, but he ventured to point out to Dr Mapother that there was one point upon which he wished to join issue with him, namely Dr Mapother's remark to the effect that he had not practised psychotherapy, but only supervised, whereas Dr Good was speaking, to the best of his ability, not only as one who had supervised, but as one with absolute clinical experience.

In reply to Dr Stoddart's remarks, he expressed himself to be in entire agreement with him in not employing a mixture of the endocrine extracts. Nevertheless, he realized that endocrines were of enormous value, and provided one could find which endocrine was affected much might be done by the proper use of the appropriate extract. He quoted a case of Graves' disease as an instance where menstrual functions were interfered with, as well as many cases where the exhibition of ovarian extract seemed to have been one of the great factors in causing improvement in the general condition.

As regards the group of cases which are designated by the term 'dementia praecox,' Dr Good suggested that perhaps further research with endocrine extracts might prove the truth of Freud's theories and that Sir Frederick Mott's discovery, that the testicle and ovary showed degenerative changes in cases of dementia praecox, might possibly be a physical proof that where the physiological functions of the sexual glands were interfered with there was a corresponding blocking of the libido in so far as that, as the individual was unable physically to propagate, his libido could have no discharge in this direction and he was forced back into himself, and therefore he would have, in a physiological sense, an accentuation of his narcissism.

Dr. GALT admitted that he had replied very inadequately to many points raised in the discussion, but felt that it was difficult on the spot at the moment to think out some of the points raised and reply to them in the proper manner. He felt that he had really said quite enough concerning the address of the book and he wished to express to the meeting his appreciation of the way in which they had received his paper, and of the assistance it had been to himself to hear the views of the various members on the points raised.

OBSERVATIONS ON THE FORMATION AND FUNCTION OF THE SUPER-EGO IN NORMAL AND ABNORMAL PSYCHOLOGICAL STATES¹

By SYLVIA M. PAYNE

THE theory and practice of psycho-analysis have advanced side by side; the theoretical formulations are the outcome of laborious clinical observations on the psychology of the individual. The theory of repression is accepted by a large number of psychopathologists who recognize its manifestations day by day in their consulting rooms, even if they are not familiar with the technique by means of which repression may be lifted. The psycho-analyst is familiar with the nature of the repressed, and in each particular case will have varying difficulty in ascertaining the exact content of the repression or, in other words, in interpreting the symptom presented by the patient. The task of interpretation, however, plays only a subsidiary part in the technique of the treatment, and is preceded by the overcoming of the repressing forces; the success or failure of this attempt is the factor on which the therapeutic result rests.

Progress in technique necessitated the study of the repressing forces, and the attempt to formulate the mental institutions concerned, to discover their genesis and relation to instinct impulse. Freud's work in this direction is familiar to most of us, but for the sake of clarity I would remind you that he speaks of the undifferentiated instinctual reservoir of mental impulses, with which the individual is endowed at birth, as the *id*. With the necessity for adaptation (to the interplay of internal instinct stimuli and the stimuli from the outer world) differentiation takes place in the mental apparatus, forming an organization which is familiar as the *ego*.

The organization of the ego is the first modification which can be recognized. It has the function of inhibition and control of instinct impulses by internal adjustment or external motor action in the interests of self-preservation. The internal adjustment includes the formation of a grade in the ego. The formation of this grade is primarily the result of the helplessness of the child in the face of the refusal of its infantile desires by the all-powerful parental figures, and consists of a psychological identification, and introjection or incorporation into the ego-

¹ A paper read before the Medical Section of the British Psychological Society, February 23rd, 1927.

Dr Good admitted that he had replied very inadequately to many points raised in the discussion, but felt that it was difficult on the spur of the moment to think out some of the points raised and reply to them in the proper manner. He felt that he had really said quite enough considering the lateness of the hour, and he wished to express to the meeting his appreciation of the way in which they had received his paper, and of the assistance it had been to himself to hear the views of the various members on the points raised.

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system of the parents or their substitutes, with their prohibitions and demands but not their privileges. Freud named this psychological organ of adaptation the *super-ego*, or *ego ideal*, and he describes it as the most powerful factor favouring repression. In *Group Psychology and the Analysis of the Ego* he says:

It comprises the conscience, a critical faculty within the ego, which even in normal times takes up a critical attitude towards the ego. . . . On previous occasions we have been driven to the hypothesis that some such faculty develops in our ego which may cut itself off from the rest of the ego and come into conflict with it. We have called it the 'ego-ideal,' and by way of functions we have ascribed to it self-observation, the moral conscience, the censorship of dreams, and the chief influence in repression¹.

The part played by the super-ego in the instigation and maintenance of repression is sufficient ground for the suspicion that alterations and distortions of its function are likely to be present in pathological conditions, in which repression plays a part, and that such is the case has been amply proved by psycho-analytical investigation.

Before approaching this side of the subject it would be well to discuss in more detail the structure and function of this institution. Freud speaks of it as the heir of the Oedipus complex, and states that the most simple and uncomplicated form arises as follows. At the earliest stage identification and object-cathexis cannot be distinguished, but this distinction is soon demonstrable and the first object-choice is the parent of the opposite sex, whilst the identification with the parent of the same sex persists. When the Oedipus stage is reached the intensification of the object-cathexis is accompanied by an intensification of ambivalence to the parent of the same sex, who stands in the way and prevents the fulfilment of the positive heterosexual wishes. The outcome of this situation may be an intensified identification with the parent of the same sex, or an identification with the parent of the opposite sex; the first result favours a normal heterosexual development, whilst the second, as we shall see later, has relation to the development of homosexual trends.

In a recent article on "The Origin and Structure of the Super-Ego"² Dr Ernest Jones points out that hostility towards the parent concerned is the essential condition of super-ego formation, whether the identification is with the parent of the same or the opposite sex, and draws attention to the analogous mechanism which operates between homosexual brothers, where the primary hostile feeling is superseded by an object-cathexis which results in an identification.

¹ *Group Psychology and the Analysis of the Ego*, p. 69.

² *International Journal of Psycho-Analysis*, vol. VII, p. 303.

The constitutional bisexuality of mankind plays an important part in determining the type of identification, and is also probably responsible for the mixed and complicated psychological structures which occur especially in pathological mental states. A comparison between the development of the super-ego in the two sexes should be of some moment to us. In both cases the first person towards whom ambivalent feeling, *i.e.* love and hate, is directed, is the mother. Primarily this feeling is directed to the mother's breast which supplies needs and gives the required sense of contentment and pleasure at one time and withholds it at another. In the normal male, theoretically, the oral and pregenital ambivalence passes on to object-love towards the mother at the genital level, and as this stage is reached ambivalent feelings are developed in relation to the father, who is the feared, admired, and envied obstacle to the fulfilment of the positive love-wishes. Self-preservation, stimulated by castration-fears, sets in motion the identification with the father, it is as if the helplessness of the boy-child makes him say "To do what father does, I must *first* be like father." This resolve includes therefore a temporary abandonment or postponement of infantile desires, and instinct-aim is temporarily diverted to achieve the necessary ego development. Expressed in terms of the libido theory, we should say that cathexis is partially withdrawn from the external object, the mother, and is transferred to a part of the ego; object-love is abandoned in favour of secondary narcissism. This transference of libido is accompanied by a partial desexualization which corresponds to the change in aim already referred to. The formation of the super-ego can be regarded therefore as a form of sublimation, and it is interesting to note that further development of the super-ego takes place especially during the latent period, which coincides with the beginning of education—a time when doors are opened to other roads of sublimation.

In the case of the girl the primary ambivalence to the mother persists and the primary identification merges into super-ego identification at the Oedipus stage when the main object-cathexis belonging to the father is withdrawn from him.

The question arises what it is in the case of the girl that corresponds to fear of castration in the boy, and causes her to abandon her Oedipus wishes and to identify with her parents, thus forming her super-ego. Freud was inclined to believe that the Oedipus complex fades away¹ as the result of the hopelessness of realization, but recently he has suggested that it is fear of the loss of the mother's love which is the dynamic factor, and he holds the view that as a result of the difference in origin the

¹ Freud, *Collected Papers*, vol. II, p. 275.

super-ego is not so inexorable, impersonal or independent of its affective origin in woman as in man, and that woman's level of moral normality is different from that of man.

In a recent article, called the "Flight from Womanhood,"¹ Dr Horney of Berlin has made some interesting references to the possibility of errors arising in the interpretation of woman's psychology in terms of man's psychology, and one point which she stresses is that the fears of the little girl which up to now have been interpreted in terms of the castration complex may have another origin. From the analysis of many women patients she points out the frequency with which the fear of injury from assault and childbirth can be traced back to childish phantasies concerning the 'big father' and the 'big baby.' We have only to remind ourselves that in the child's mind the perception of size is of fundamental importance. Power, strength and importance, are all estimated by size. We see this in dreams which employ infantile modes of thought; the importance of a figure may be represented by exaggerated proportions.

The fear roused by the incest phantasy in relation to the big father, and fear of the injury caused by the fulfilment of the desire for the relatively big baby, is fear of a real danger, in the same sense as the boy's fear of castration is; especially if a birth in the family has shown that the mother is ill in bed when the baby arrives.

The fear is of course linked to incest guilt just as the boy's fear is. I have recently analysed a case in which this fear of injury from the large penis, and fear of childbirth were unconsciously the cause of dyspareunia because of their association with the incest phantasy. The guilt was associated with masturbation, and realization of the unconscious phantasy had been obtained by instrumental dilatation of the vaginal orifice, a treatment which had no organic justification. It was an attempt to obtain a repetition of this treatment which led to her being sent to me for analysis. Another patient, when speaking of her childish theories of birth, said to her analyst, "I think I wondered how such a big thing could get out."

Material kindly supplied by another analyst, from the analysis of a young unmarried woman who was suffering from a severe psycho-neurosis, is particularly appropriate. The patient came into the room looking disturbed. Her first words concerned her housekeeper, a young married woman, who feared she was pregnant as she had missed four menstrual periods, "Why doesn't she want a baby?" the patient said, "I can't think why she doesn't." She then remarked that she had not menstruated for four months, but did not bother about it. Then she

¹ *International Journal of Psycho-Analysis*, vol. VII, p. 324.

grew restless and kept repeating "I'm afraid." She got up and walked about the room, and then sat down and exhibited signs of agitation, saying, "I can't go on with this." The analyst asked her what she was referring to. She was confused but said she meant coming to the treatment. She paced the room a second time and sat down saying to herself quietly "How can a camel get through the eye of a needle?" "It must be cut into tiny pieces but it won't be a camel any longer." There followed a quotation from *Richard II* (act v, scene v):

"Come little ones," and then again,
 "It is as hard to come as for a camel
 To thread the postern of a needle's eye."

Then the patient said "What is all this about?" The explanation was led up to by reference to the idea of the huge camel getting through a very small hole. The patient saw the association to the birth of a baby and understood that the fear was based upon the phantasy of a baby of disproportionate size to the body of the child who wishes to have a baby of her own, *i.e.* how will it get out? The patient thought that the only possible way a child can imagine is by actual destruction of life. After this explanation the agitation completely subsided and the patient proceeded with new memory-material from her childhood days.

It is possible therefore that fear of two dangers causes the girl child to abandon her Oedipus complex: (1) the danger of the loss of the mother's love, which stands for the fulfilment of all bodily needs; (2) the danger of injury in the event of the fulfilment of the incest phantasy.

The strength of the latter determinant must have an important influence on the relative importance of the mother and father identifications in the super-ego, because fear of injury provokes hostility, and hostility identification. Thus we should expect the father-identification to be accentuated in those cases in which the fear of injury was prominent. Possibly the frequency of the mixed identification in the super-ego of the woman may have some explanation here.

If the super-ego of the woman differs from that of man in the way suggested by Freud, the differences appear to me to be that the super-ego of the woman retains more infantile characteristics than that of the man, that is to say it is more prohibiting, and less permitting, certainly as far as sexual gratifications are concerned. We may take for example the frequency of frigidity in an otherwise healthy woman, which denotes the persistence of the taboo of the infantile super-ego; secondly the much greater guilt reactions to masturbation in a girl than in a boy; thirdly the fact that functional nervous disorders are more common in woman than

in man, and are predominantly the result of repression in connection with the Oedipus complex and the formation of the super-ego.

One factor in the causation of the persistence of the infantile super-ego in woman is certainly an external social and economic one which in the past has prevented adequate realization of positive wishes bound up in her super-ego formation, especially when they resulted from her father-identification. Reich has pointed out¹ that the real ego develops largely by the carrying out of the super-ego wishes, as a result of which they become part of the ego, thus strengthening and developing the personality. It is obvious that external difficulties may hinder this ego-development and tend to thrust the individual back to infantile demands and the subjective attitude of childhood. It will hardly be denied that early nursery authority is usually more lenient to the boy-child than the girl, so that the way is paved for a prohibiting rather than a permitting critical faculty which ensures progress and advance to maturity and health.

The relation of the super-ego to consciousness brings us to another important question to be discussed in this paper. We are familiar with the super-ego as a conscious critical faculty establishing a conscious ideal. The success or failure of the ego in attaining the ideal is attended with corresponding feelings of well-being or of failure and guilt. Theoretically it might be expected that the super-ego must in part function unconsciously, for at least three reasons: (1) Because it is an instigator of repression, which is an unconscious process; (2) Because of its intimate association with the Oedipus complex, and thus with the most primitive instinctual impulses which are unconscious; (3) Because the presence of conscious guilt feeling without adequate cause in some cases leads to crime in order to satisfy an unconscious need for punishment. A common example of this mechanism is found in the man who confesses to a crime which he has not committed. An illustration met with in analytical experience was that of a little girl of nine who was found by her teachers giving herself bad marks although she had done nothing wrong. The unconscious need for punishment which had caused these actions yielded to analytical treatment. It proved to be due to the unconscious desire to be given a baby by her father.

Freud has made it very clear to us how he first arrived at the conclusion that in many cases of neuroses there is an unconscious moral factor which jeopardizes the chance of cure. He says that he met with a type of case in which the therapeutic result did not correspond with that which previous experience had given him the right to expect, and

¹ *Der Triebhafte Charakter*, p. 11.

in such cases the benefit was not only absent but the symptoms were intensified and he was confronted with a negative therapeutic result. There seemed to be a 'will to disease' in these cases rather than a 'will to health,' and there was no doubt that something in them fought against a cure, the approach of which was feared as a danger. Finally he concluded that it was a question of a moral factor which found gratification in illness and would not relinquish the punishment of pain. The patient was not conscious of feeling guilty; he felt ill, not guilty. Freud speaks of this reaction as an unconscious need for punishment.

The recognition of an unconscious need for punishment as a determining factor in the health or illness of humanity is an important advance in our knowledge. I would remind you of Dr Edward Glover's paper on "The Neurotic Character," read before this Society last year, in which he pointed out the same determinant in human conduct, illustrated by the repetition of stereotyped situations involving material disaster or injury to an individual and determined by an unconscious need for punishment. Recent writings by Alexander, Reich and Reik have laid other aspects of the significance of this psychological demand before us. Alexander goes so far as to say that

The core of the whole psychology of the neuroses is contained in the sentence that guilt is redeemed through punishment, through suffering.....[The neurotic] can cling to primitive and condemned tendencies while his conscience displays this attitude; he undergoes punishment and suffering at the dictate of conscience so that he may still cling to that which makes him feel guilty¹.

In his book entitled *Geständniszwang und Strafbedürfniss* Reik differentiates between a primitive urge to expression which is characteristic of instinct impulse and manifestation of unconscious instinctual trends which an individual may present unconsciously in action, or as a slip in word or writing, or as a neurotic symptom. There are certain differences between the universal urge of instinct to expression and the impulses which lie behind the particular mode of expression referred to, which Reik calls the "compulsion to confess." In the latter case the individual is not aware of the meaning of the expression, or of the need it expresses, or of the other person concerned, if any. When the instincts which are striving for expression are rejected and condemned by the environment, hence by the super-ego, they can only be brought to expression in this form. The actual end-presentation is determined by the original instinct impulse and also by the repressing factors, and both these determinants are represented in the expression.

¹ "Neurosis and the Whole Personality." *Internat. Journ. of Psycho-Analysis*, vol. VII, 3-4. p. 348.

There is nothing new in these observations, except that special stress is laid on the importance of the fact that this form of instinct expression bears witness, as Reik says, in the manner of their appearance, to the activity of those mental instances which condition repression, i.e. to the criticism of the super-ego and the response of the repressing ego. His explanation of the term "compulsive confession" is as follows:

1. The compulsive character is derived from the universal instinctual urge to expression which cannot be denied, but is dammed back by the forces directed against free expression, and as a result is intensified and takes on a compelling quality.

2. The confessional character from the fact that the presentation is a compromise, demonstrating the condemnation as well as original instinct impulse, and therefore demonstrates a modification of instinct aim.

Speaking of the neurotic symptom Reik says:

In so far as the symptom is in its essentials constituted and maintained as a substitutive formation and substitutive gratification of unconscious impulses, we may speak of its unconscious confessional character. The symptom is regarded as suffering and is not recognised by the patient as a confession. Not only the psychic forces to whose dynamic the symptom owes its existence remain unconscious, but also one of its essential aims¹.

In so far as it makes clear the recognition of the part played by the unconscious critical faculty in these unconscious manifestations it seems useful to use the term compulsive confession, but it rather suggests that the expression is more than a compromise, and appears to lay too much stress on the significance of the unconscious super-ego—certainly when applied to slips of the tongue, writing, and automatic actions.

Of more importance to the theme of this paper is the relation of compulsive confession to the unconscious need for punishment. Reik points out that children frequently dread the confession of a misdeed more than the punishment that may follow. The anxiety can be displaced from one to the other, with the result that the confession itself is a punishment. In the case of the neurotic undergoing analytical treatment we have special opportunity for investigating these points. The patient confesses consciously and unconsciously and his tension is often relieved quickly, before the unconscious sources of his neurosis have been revealed and worked through. The reason for this is that (a) his conscious guilt, if present, is relieved by confession; he overcomes by his action a certain measure of his dread of the community; (b) by attempting to present the whole content of his wishes and desires to the analyst, he is in a sense

¹ *Geständniszwang und Strafbedürfniss*, pp. 23 and 24.

trying to project his super-ego and endeavouring to return to those early days when his own critical faculty was represented by his parents, and had not been introjected into his ego system; those days when his sense of guilt was represented by fear of external dangers, which in adult life no longer exist; (c) his unconscious need for punishment is relieved in so far as confession and punishment are identified.

When considering the relation of an unconscious need for punishment to the suffering of the neurotic we are reminded of the great stress the patient lays on what he endures. Take the case of a woman with an hysterical affection of the foot, sometimes felt as a pain and sometimes manifested as a spasmodic contraction of muscle, which on a few occasions has been followed by an hysterical convulsion. In her analytical hour her first object is to relate what she has suffered. Her suffering is often described as being "too terrible for words," a significant phrase from an analytical point of view, but a description obviously out of place as far as the actual pain is concerned and incompatible with the whole demeanour and appearance of the sufferer. The guilt in this case is centred round an unconscious homosexual relationship with a sister, and repressed hostile wishes against her husband and brother. She feels ill, not guilty and expiates her repressed wishes by suffering. The symptom represents the unconscious moral condemnation as well as the unconscious libidinal and aggressive wishes. The overcoming of the resistance involves the partial replacement of unconscious self-punishment by confession.

Reik observes that by confession the criminal not merely replaces the inner judge in his own mind, the super-ego, the secret ally of his repressed tendencies, but also the judge in the world without, thus accomplishing a step to social life. It is the same thing in the case of the neurotic patient; the overcoming of the repression means that the alliance between the unconscious super-ego and the repressed tendencies is broken down, and the ego decides on an attempt at social adjustment.

A study of Freud's conception of the formation and function of the super-ego is not complete without reference to his theories concerning the instincts and their vicissitudes. His grouping of the primary instincts into life or sexual instincts, and death or destructive instincts, at first sight may appear too speculative and unconvincing to form a useful theory for application to clinical facts; but familiarity with the conception and its biological and physiological analogies, together with the working out of the theory in connection with sadism and its manifestations in melancholia, modifies these preliminary doubts

and leaves us a useful working hypothesis which so far has not been excelled.

The aim of the life-instinct is the conservation of life; the aim of the death-instinct is the reinstatement of a former existence, to retreat from organic to inorganic life. To quote Freud's own words,

It appears that, as a result of the combination of unicellular organisms into multicellular forms of life, the death-instinct of the single cell can successfully be neutralised and the destructive impulses be diverted towards the external world through the instrumentality of a special organ. This special organ would seem to be the musculature; and the death-instinct would thus seem to express itself—though probably only in part—as an instinct of destruction directed against the external world and other living organisms¹.

Freud postulates a fusion between the two groups of instincts, which is neither permanent nor complete, so that the results of 'defusion' can be demonstrated in normal and abnormal mental states. The sadistic component of the sexual instinct exemplifies the process of instinctual fusion, whilst the perversion in which sadism has made itself independent illustrates the result of a partial defusion. The process of defusion of instinct plays a part in the mechanism of super-ego formation.

As I have already pointed out the organization of the super-ego represents a type of sublimation involving a desexualization of instinct impulse. This desexualization is accompanied by a defusion of instinct, the result being that the aggressive elements are not bound by the erotic constituents, but are represented by the harsh and critical impulses characteristic of conscience, in an extreme case an overbearing critical faculty which meets out punishment to the ego. Freud points out that the more a man controls his external aggressive tendencies the more severe his ego-ideal becomes, and this can be looked upon as a result of the turning in on the self of his aggressive tendencies.

In two pathological conditions, namely obsessional neurosis and melancholia, which I shall deal with later in my paper, the aggressive characteristics of the super-ego are grossly exaggerated, and in these cases it is easier to study the results in terms of Freud's theory of instincts and their defusion than in more normal states.

A survey of the analysis of various forms of psychoneurosis with the object of relating, if possible, different types of super-ego formations with recognized forms of neurosis, enables us to distinguish at least four groups of cases.

1. In the first group of cases I have classified those which demonstrate markedly a mixed parental identification in their super-ego formation.

¹ Freud, *The Ego and the Id*, pp. 56-57.

There is no prevailing identification. This variation is common in both sexes; in a woman it has bearing on the so-called masculine complex which leads her to desire masculine occupations as well as or preferably to, the fulfilment of her purely feminine functions. Where social and economic factors are favourable there seems to be little reason to suppose that health and happiness and social adjustments are incompatible with this ideal, but where realization is not possible, attempts at repression take place and failure leads to symptom formation.

2. In the second group I have classed cases in which the identification with the opposite sex preponderates, leading to different forms of homosexuality. Manifest homosexuality, although asocial, is sometimes compatible with health. Repressed homosexuality is an important factor in the psychoneuroses and psychoses. It is most commonly recognized in obsessional neurosis and is constantly present in paranoia.

3. My third group consists of cases in which the super-ego manifests abnormally aggressive characteristics, leading in one class, namely the obsessional neurosis, to extensive reaction-formation in the ego for the purpose of evading guilt consciousness, and in a second class, consisting of the depressed states and melancholia, to the possibility of self-destruction.

The most obvious guilt complex is met with in the obsessional neurosis. Patients may spend their time symbolically removing their guilt by washing. Elaborate rituals are performed which are all defensive mechanisms to wipe out or elude the guilt feeling that would result if the original sadistic wish were gratified. Conscience wreaks its vengeance on the ego, and the ego is not aware of the cause of the punishment but is compelled to act as if it were guilty. The cause of the exaggerated severity of the super-ego is ascribed in the first place to the presence of intensely aggressive wishes at an early age, combined with a precocious ego development, which results either in the formation of the super-ego at the anal-sadistic stage of libido development, or in the formation of the super-ego being accompanied by a regression to that stage.

This regression is accompanied by defusion of instinct so that the destructive component is dynamic in the super-ego and the erotic in the id. The regression to the anal-erotic level makes possible the identification of the libidinal and destructive impulses, and the wish which is a result of this identification is rejected by the ego which defends itself with reaction-formations. The aggressive love-wishes are directed against an object in the outer world, and for this reason the obsessional does not commit suicide although he may make his life a torment.

Many children show obsessional tendencies during the latent period; they are over-conscientious, set themselves tasks and punishments, and feel obliged to confess the most trivial offences. At this stage of development the super-ego is especially dominant and these children do not necessarily develop a compulsion neurosis. An obsessional patient from eight to ten years of age felt compelled to spend half an hour over her prayers, which must take a certain form and order. These prayers were spontaneous and had nothing to do with formal religion, in which she had had no teaching at all. After puberty these habits passed off and she was healthy and happy. In adult life, after a number of external disasters beginning with the death of her mother and father, and culminating in the abandonment of an illegitimate child on her marriage, she developed an acute obsessional neurosis. She expressed great faith in the efficacy of confession although she had never practised it, and it was clear from the beginning of the treatment that the expression of her conflict which, as we so often find, relieved the tension of her guilt immediately, corresponded to a tendency which had been intuitively recognized. As I have already pointed out Reik would say it gratified the universal instinct to confess, which relieved the need for punishment.

In these cases the treatment temporarily becomes a compulsion, and is thus obviously partially taking the place of previous compulsive actions which have the dual determination from the unconscious already referred to. Verbal expression apparently gives a modified and limited gratification of the repressed desire when the transference situation has been established. It may be the intuitive recognition of this fact that causes some people to condemn the reproduction and verbal expression of these infantile sexual and aggressive wishes even as a means to an end, that end being the restoration of health. Thus we have in the technique of treatment, as I have pointed out in the case of the neurotic symptom, a dual gratification of instinct impulse, the difference being that the dynamic changes brought about by the confession and the transference situation are stepping-stones to further changes which make mental adjustment feasible.

The second group of cases in which the aggression of the super-ego is especially dominant is that of certain forms of melancholia and depressed states. The state of melancholia has many features in common with that of grief experienced by a normal person after the loss of a loved one¹. In both states we have dejection, loss of interest in the surroundings, loss of capacity to love, and loss of activity. In melancholia we have in

¹ Freud, *Collected Papers*, vol. iv, p. 152.

addition a profound loss of self-esteem, an overwhelming sense of guilt and failure, self-criticisms, reproaches and the expectation of punishment. The self-criticism is the work of the super-ego which appears to have mastered all the available aggression and directed it on the ego, which accepts the criticisms as merited and makes no attempt at self-protection as in the case of the obsessional. The explanation of this behaviour rests on Freud's theories concerning the psychological reaction of these people to the withdrawal of their love from a person who has failed, hurt, or in some way thwarted them.

The withdrawal of the libidinal cathexis is followed by a psychological regression to the oral stage, in which the loved object is made part of the self by incorporation (eating) and is thus also destroyed; psychologically the lost love-object is introjected into the ego, and there experiences the reproaches and criticisms which have been withheld from the originally loved external object. The predetermination of this regression must rest on a development fixation at this early point, the oral stage, which according to the work of Abraham is characterized by the first signs of ambivalence and sadism. In this case as in that of the obsessional the overwhelming concentration of aggressive impulses in the super-ego is due to the defusion of instincts accompanying regression, resulting in as Freud says, "a pure culture" of the death-instinct taking possession of conscience and attempting to drive the ego to destruction.

Clinically it is not hard to prove the truth of this hypothesis, apart from the use of the technique of psycho-analysis. Careful observation and attention to the reproaches and criticisms of the patient, combined with a history of the case, will enable the doctor to recognize the person who plays the leading part in the drama, and has been instrumental in exciting the attack, according to the psycho-analytical view.

4. In the fourth group of cases the early formation of the super-ego has been interfered with or appears to be isolated and shut off. Reich has described this formation in connection with a class of cases for which he uses the term 'instinct-ridden.' The cases he describes under this heading include a criminal type; broadly speaking they suffer from an ineffective critical faculty, they have practically no conscience, their sexuality is manifest and uncontrolled, the guilt, if present, is anchored in neurotic symptoms or repressed.

This group is a contrast to the last owing to the fact that the prohibiting oppressing activities of the super-ego are absent or ineffective, whilst in the preceding group they constitute the main mental occupation. Cases of this type are more frequently seen by the criminologist than by the doctor and are not often presented for analysis.

Another variety of the same type of case is represented by one in which the super-ego formation is interfered with by the behaviour of the parents. It is remarkable, from superficial observation only, how frequently the history of asocial behaviour of one or other parent, or of differences between them, is found to form part of the story of the patient's illness. A deeper investigation reveals the difficulties caused to ego-development. There is much work to be done here of a precise and detailed nature, and I will only indicate that the traumatic disturbance of a parental identification through the child's discovery of a parent's gross failure to fulfil the ideal, may be a factor in instigating mental regression and the onset of neurosis.

In conclusion I would remind you that the organization of the super-ego corresponds in its functions to the herd instinct which has been formulated by many psychologists; primarily, in early life, it represents an attempt at adaptation to family life, secondarily, in adult life, the mode of its development is a measure of social adaptability. A failure of adaptation to family life, when the environment is favourable, is a precursor of failure in group life. This is obvious enough to be a platitude.

Again every psychologist recognizes the neurotic as an individual who cannot adapt himself to community life, whose attempt at adaptation has partially failed and who must be content with a compromise, a symptom which is dynamically determined not only by repressed instinct impulse of the id, but also by the unconscious demand for punishment involving suffering because of the asocial impulse.

Alexander has made an interesting suggestion concerning the relation of social service to guilt-feeling. When dealing with unsublimated libidinal impulses we are familiar with the fact that genital primacy and a satisfactory relationship ensures the resolution of guilt-feeling and the satisfaction of libidinal desires. The question arises why there is no guilt reaction in connection with sublimations and social relationships in spite of the fact that their libidinal origin cannot be undetected by the unconscious critical faculty. Alexander reminds us that in the sphere of literature Sachs has already suggested that it is the social factor which distinguishes writing from phantasy making, and it is the fact of the presentation to others which dissipates the sense of guilt. Alexander would give this idea a wider application. He says,

A social act silences the feelings of guilt; it has in the normal man an economic function similar to that of suffering in the neurotically sick. But the neurotic pays with a coin of narcissistic value, he is able to draw from his suffering masochistic

pleasure, whilst an act that is socially directed is an active performance that can be of use to others¹.

A well recognized form of treatment for neurotics which, though not curative in the true sense of the word, may relieve symptoms and enable the patient to carry on, is the setting of useful tasks or making the patient take up definite work, preferably of a social nature. The benefit which results must have relation to the gratification of conscious and unconscious wishes. Super-ego demands, and the unconscious need for punishment, are satisfied by the work, and the other determinant of the symptom of a libidinal nature, is satisfied through the transference to the doctor controlling the treatment. The work of course may satisfy other demands as well as those indicated.

It is obvious that the presence of an unconscious moral factor in the mind is important not only to mental therapeutics but to a wider circle of knowledge which includes sociology, criminology, religion and education, spheres which have already benefited by the researches of psycho-analysis, and are likely to continue to do so as the science advances.

¹ *International Journal of Psycho-Analysis*, vol. VIII, p. 352.

CRITICAL NOTICE

Psychological Healing. By PIERRE JANET. 2 vols. Allen and Unwin. pp. 1265. 42s.

To those who take a serious interest in psychological medicine the views of Pierre Janet must always command attention. There are, we believe, distinct defects in his theories from the point of view of modern psychotherapeutic principles, but the extent of his clinical experience and the detailed accuracy of his observations remain unrivalled.

In these two volumes he gives a systematic survey of all the various systems of psychological healing, from miraculous healing, philosophic and moral methods, through methods which utilize the patient's automatism, particularly suggestion and hypnotism, to psychological economies like those of rest, isolation and mental liquidation, under the last of which he includes psycho-analysis.

In the second volume he deals with psychological acquisitions such as educational methods and treatment by excitation, psychological and moral guidance.

A glance at this list will convince the reader of the value of this book if only as a historical digest of the various systems of healing: to acquire the same information elsewhere would take a vast amount of reading.

We are familiar with Janet's theories previously published with regard to these psychopathological states. Briefly stated, they are that the mind is a synthesis, built up of the varied and innumerable mental experiences, sensations, etc., which come to us daily. This synthesis is maintained by 'psychological tension.' At any particular moment we possess a certain quantity of psychological energy which enables us to reach a certain level of psychological achievement. If our energy is at its highest we are capable of reasoning, reflection and the organization of facts. If the level of energy is lowered the synthesis of our personality becomes weakened and we fall into a state of psychasthenia, characterized by the feeling of incompleteness, and states of hysteria, fugue states or dual personality, due to dissociation and splitting of the personality. The factors which determine this 'depression' or lowering of our mental energy are partly hereditary, partly the result of toxæmic states, fatigue, shocks, or persistent emotion. In this way Janet links up the psychoneuroses with physiological states. He quotes, for instance (p. 399), Tissie, who observed that upon a six days' bicycle race the competitors suffered from loss of will, obsessions, phobias and delusions of persecutions.

Emotion and fatigue are according to Janet almost identical; "both these phenomena are psychological states of depression in which there are inadequacies and agitations." The difference between them is that emotion is prior to action and appears to inhibit action, whilst fatigue follows repeated action or even inaction. Elsewhere he describes emotion as 'surplus behaviour,' and any form of surplus behaviour is an extravagance which leads to fatigue.

Whenever, therefore, an individual is faced with a task or situation in

life which is too much for him, such as entry into life, examinations, quarrels and dangers, he gets into an emotional and fatigued state—in brief, tends to become neurotic. If, on the other hand, he retires from tasks of a higher level to a lower level there is abundant energy for this task and surplus emotion is liberated. Presumably this is the mode of cure practised by the neurologist who advises the harassed business man to play golf three times a week.

We cannot help feeling that Janet uses 'emotion' in too pathological a sense, as synonymous with emotionalism, anxiety or agitation. Just as fatigue may be, as he says, normal, representing a desire for rest; so emotion in the ordinary sense encourages and predisposes to action. It is only when the attempt is thwarted, thrown back, as it were, into the organism that we have the condition of emotional anxiety, which predisposes to fatigue.

We turn with some interest to the chapters on Suggestion and Hypnotism. After giving several typical instances of suggestion he characterizes this state as (a) being concerned with *action*—and he includes hallucination as 'actions' inasmuch as they are a line of behaviour, and (b) they are *incomplete*.

He proceeds to show the analogy between suggestion and impulse, by virtue of their being the outcome of lower grade tension as distinct from the higher grade activities such as reflection, and thus capable of releasing a large amount of energy since they require less energy for their performance. He therefore corrects his former definition of suggestion and now looks upon suggestion as "the induction of an impulse in place of reflective realization."

The question then remains as to "the conditions under which suggestion occurs"—and Janet introduces us to the various theories. Suggestion may be regarded as the "hypertrophy of a tendency." In particular we may assume the hypertrophy of one tendency, the tendency to *submission*. Here he discusses the Freudian theory, namely that of sexual submission: "Credulity and hypnotic docility are rooted in the masochistic element of the sexual instinct": or, quoting Dr Ernest Jones, "The subjects obey the suggester because they are more or less in love with him." Janet replies, "For my part I am much more sceptical, and I think that these weak and suggestible individuals are as incapable of loving as of obeying" (p. 254). This criticism hardly meets the case: after all a person can *crave* for love without being capable of loving, and we presume it is the former type of activity to which the psycho-analyst refers. A stronger objection is that "suggestions may originate from things as well as from persons," for even if we explain this by 'displacement,' the fact remains that it is the patient's *attitude of mind*, not the other person, which is the fundamental fact in suggestion. Perhaps truth lies between these conflicting views so that even if we assume that suggestion is based on *love*, may this not be a craving for protective love rather than a craving for sexual gratification? It is this sense of dependence upon a protective love, associated as this often is with sensuous gratification, which seems to me to be at the basis of the suggestibility of both the child and the adult.

The 'subliminal' theorists (Myers, Bramwell, etc.), agree with Janet in regarding suggestion as the development of an inferior tendency emancipated from the control of reflective and personal tendencies, and its development in the form of an impulse. But while Janet regards this development as due to the weakness of the superior tendencies (reflection, etc.), the subliminalists regard it as due to a peculiar strength and energy of the subliminal forces. According to this theory suggestion is an appeal which makes its way into

the subliminal consciousness. Janet further discusses the idea of suggestion as 'concentration of attention,' but whilst accepting the fact that concentrated attention leads to action he explains this as being due to the fact that the attention leads to fatigue of the higher functions, and so paves the way for the liberation of suggestion. The theory of monoideism, according to which an idea detached from other ideas will exercise an unusually powerful force on the mind, is one of the important determinants of suggestion, but is tantamount to concentration of attention.

Janet's own view, working on his theory of psychological tension, is that suggestion is due to a reduction in the power of psychological synthesis because of a lowering of psychological tension: it is in fact a form of psychological depression. We therefore find suggestion most pronounced in conditions of physical fatigue, states of emotion, which are "in reality nothing more than a state of fatigue," in intoxications, and in hysteria: and he reiterates his opinion that a suggestion is an eminently hysterical phenomenon, being witnessed most often and most easily in this particular neurosis. Once more we must criticize the use of this term in too morbid a fashion. Suggestibility is a normal characteristic of the human mind emerging about the third year of life, and developing into sociability. It is of distinct biological value. To have it in marked degree may predispose to hysteria, but it is not hysteria. It is generally agreed that all soldiers and sailors are very suggestible, but who would venture to say that they are, ordinarily speaking, the most hysterical part of the population? The 'normal' psychologists must keep an eye on these psychological marauders who would steal healthy words and attach to them exclusively morbid meanings!

Janet explains hypnotism in the same way as suggestion: "The essential factor in hypnotism is depression, the arrest of the normal individual consciousness, the suspension of the special mental condition which we regard as the waking state—a state which is unstable in patients whose mental tension is very readily lowered so that it is annulled under the influence of fatigue and emotion." The difference between suggestion and hypnotism is explained thus: "Suggestion and hypnotism are nothing more than the artificial employment of impulse and somnambulism. When we suggest we induce an impulse in the place of a reflective voluntary action: when we hypnotize, we induce somnambulism in the place of the waking state." "The suggestion of sleep seems merely to guide the inferior tendencies which now replace the superior tendencies." By this means Janet brings both suggestion and hypnotism under his general principle of levels of psychological tension.

Janet holds with some other writers that "the phenomena of suggestion are independent of the hypnotic state"—chiefly on the grounds that the hypnotized subject is often far from suggestible. This contention, maintaining the essential difference between suggestion and hypnotism, does not seem to tally with the view that suggestion is an induced impulse whilst hypnotism is an induced somnambulism. How are these states 'induced'—surely this proneness to induction is itself suggestibility, the difference being that in the one case impulse is suggested, and in the other somnambulism? Both are dependent on a 'submissive' state of mind. The difference between them is very like the difference between the child who is suggestible to its father's moods and ideas and then adopts them for itself, when those ideas begin to work independently and automatically quite apart from the father. It is this process, though artificially produced, which takes place in hypnotism.

Under the heading Treatment by Excitation Janet discusses many forms of cure such as occupation and sea voyages. Amongst these he gives a number of examples of spontaneous cure caused by the patient being roused by some emotion, *e.g.* R. K. is freed from his characteristic doubts when he is out of temper. This instance, however, may be looked upon as supporting the abreaction theory: or at least the theory that it is the repression of emotions that is the cause of the psychoneuroses, and the release their cure.

Taking it as a whole, the difference between Janet's view and those of more recent researches is that he does not seem to have appreciated the advances made in the direction of the 'hormic' or dynamic view of psychology, which is represented on the one hand by McDougall in his theory of the instincts, by Adler with his 'urge to power,' and by Freud in his theory of the libido and of the 'wish' as the basic element in psychology. This hormic view has profoundly affected psychology and has thrown entirely new light upon the nature of morbid psychological states. To Janet the mind is 'built up' from sensations and is essentially a synthesis. Mental disorder takes the form of a disintegration of the various parts. Janet calls in the aid of psychological 'tension' and energy to hold together the synthesis of the personality, and it is the lowering of this energy which causes the psychoneuroses. But in the 'hormic' theories it is the dynamic forces themselves which, if repressed, produce the symptoms of the psychoneuroses: and it is this view which has thrown such light upon these abnormal conditions. Janet may be right in his static view and we may be wrong in regarding the mind as dynamic, but his views give one the impression of being old-fashioned. It is true that Janet says "the mind appears to consist of an aggregate of *tendencies*" (p. 225), but by tendencies he means "a disposition to produce definite series of movements in response to stimuli applied to the periphery of the body"—that is to say, they are not really inherent dynamic forces, as in the hormic view, but rather of the nature of a reflex action, a stimulus at the periphery activating certain tendencies and producing certain manifestations of behaviour.

We are here confronted with a most unexpected fact, namely that this great champion of psychological conceptions appears to be making 'gestures,' to use a political phrase, to the behaviourists! "We must look," he says, "upon all the phenomena of mind as actions." "One who is really grieved or angry is affected throughout his body by the motor, circulatory and secretory modifications of grief or anger. In hallucinations, too, there are disposition, present actions and preparation for future actions."

In defending the use of the word 'suggestion' as a form of 'action,' he is up against the obvious difficulty that hallucination also can be suggested. He answers that "one who has a certain sentiment is in reality one who adopts a certain attitude and follows a line of behaviour." To this we may reply, following Janet's previous argument, that action may accompany or result in a certain sentiment or attitude of mind, but such a sentiment is not itself action. In other words, unless one is a behaviourist one must extend the term to more than action.

It is true that we may speak of the 'action' of the mind, but it is nevertheless misleading to say that all suggestions or hallucinations must be considered solely from the outlook of action, for 'action' to the English reader signifies outward action, and the word 'activity' would have better expressed what Janet seems to mean, namely, mental activity such as we find in the sentiments, hallucinations and the rest.

Time will tell which of these theories, the mechanist or the dynamic, will produce the most satisfactory results in psychotherapy, but so far the dynamists seem to have it. One cannot but be somewhat disappointed to find the whole treatise pervaded with this older static psychology.

It is probably for lack of appreciation of the dynamic view that Janet in his criticism does scant justice to schools of thought like that of McDougall and the psycho-analysts. This lack of justice is due perhaps not so much to hostile criticism as to failure to understand the point of view. To tuck in the whole Freudian theory of treatment under a minor sub-heading of 'mental liquidation' is hardly likely to impress the reader with the fairness of his criticism.

With regard to psycho-analysis much of Janet's criticism is vitiated by the fact that he still seems to think that Freud and his followers hold to the traumatic theory of the psychoneuroses. It is not very difficult for him to prove, therefore, that "it is not true that sexual adventures and mishaps, and traumatic memories of these, are the exclusive causes of neuroses" (p. 640). It is hardly necessary for us to point out that it is many years since Freud abandoned the theory of infantile traumata and substituted that of the infantilism of sexuality.

Janet admits the importance of the sexual in the aetiology; indeed he says "that in three parts of the cases there really have been sexual disturbances, and the patients have suffered or do suffer from disquietude connected with these disturbances" (p. 628). But he denies that sexuality is a causative factor in every case. "If Freud had been content to say that his statistics show a specially high percentage; that in the region where he practises, genital disquietude and sexual disturbances are commoner than elsewhere, I should not feel moved to contradict him. I have always thought that in this matter the reputation of Paris was undeserved."

But Janet considers many of these sexual disturbances as being *dependent upon* the neuroses and not themselves primary. In this I am inclined to agree with him. The psychasthenic suffers from fatigue from the lowering of psychological tension. This naturally affects his sexual functions. "But whereas some of these patients accept the fact with resignation, others are annoyed and make desperate and ridiculous efforts to re-enter the lost paradise, thus becoming subject to all kinds of obsessions taking a sexual form."

So Janet says, "In many cases we can prove that sexual disturbances are not the cause of the nervous disorder but are its consequences and its expression." "Anxiety arises in connection with inadequacy of actions of any kind, and not solely as the outcome of sexual inadequacies."

Again he regards 'repression' as the *result* rather than a cause of the psychoneuroses. This is an interesting point illustrating the difference in the theory of 'dissociation' and that of 'repression,' which is one of the fundamental points of difference between Janet and Freud. "Repression is not a cause but a consequence; it is itself an outcome of exhaustion" (p. 649): it is "no more than one of the symptoms of a particular form of psychasthenic depression." Repression, in Janet's sense, is analogous to the 'narrowing' of the field of consciousness. There is a good deal to be said for the view that the patient because of the lowering of psychic tension finds himself unable to cope adequately with the difficulties of life. By repression therefore he limits the field of his activities and emotions so as to be more commensurate

with his psychic capacities. But surely Janet is wrong when he attributes to Freud the view that repression is a "*conscious* activity by which an individual checks the development of a tendency" (p. 640), and as "connected with normal deliberation." In psycho-analytic literature repression is described as an *unconscious* process—and no doubt the psycho-analysts would not disagree with Janet when he says, "If I make up my mind to resist the bad habit of smoking, I shall not thereupon take to smoking subconsciously in the somnambulist state." "I want to smoke a cigar, but I am afraid that smoking will make me ill. I cannot see why you should call this cigarophobia!" Nor do we suppose the Freudians agree with so elementary a psychopathology.

Janet's own view of the methods of healing he discusses under the general title of Psychological Acquisitions, by which he means not merely the methods of using and saving the energies a patient already possesses, but enabling the patient to acquire further tendencies or to recuperate those which he has lost. The methods are three: Education; Excitation; Guidance. *Educational* methods are indicated in patients whose trouble is limited to a simple motor function, and who are free from depression, are able to understand what we ask of them, and to make prolonged efforts of attention. Under treatment by *Excitation* he deals with those methods whose tendency it is to induce personal effort rather than to arouse automatism, to encourage activity rather than rest, and to favour social life rather than isolation. *Moral guidance* depends for its success not so much upon the method employed but upon the personal influence of the doctor. "We must transform this guidance into a profession which is consciously practised:...It is one of the characteristics of our day that this task of moral guidance is sometimes incumbent upon the doctor when the patient does not find enough natural support in his customary associates."

A good book, more valuable in its constructive parts than reliable in its criticism—and this is after all what one looks for. It must needs be read by those with a wider outlook in psychotherapy than their own school of thought.

J. A. HADFIELD.

A SURVEY

THE DEVELOPMENT OF THE PSYCHO-ANALYTICAL THEORY OF THE PSYCHOSES

1894-1926

By JOHN RICKMAN

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*Narcissism*¹.

§ 6. In the detailed examination of the love-life, which was and to a great extent still is the main object of psycho-analytical study, one perversion among the numerous abnormalities observed stands out prominently by reason of its peculiarity—the patient is concerned only with himself, with his own beauty and charms. Rank² ascribed it to a special form of autoerotism more commonly found among homosexuals, and thought it presented a stage in development prior to puberty when the sexual impulse was on its way from autoerotism to object love. He also noted that it occurred in cases of disappointment in love (*i.e.* when frustrated by an external object, the love returned to the self) and that it subserved a ‘rejuvenation tendency,’ or at least a wish always to stay at the same age. These superficial observations, however, did not affect analytical theory, for it was not until 1914 that Freud’s “On Narcissism: An Introduction”³ began the revolution in thought.

The attention of psycho-analysts was here turned to the phenomenon or phenomena of narcissism, not so much because of the perverse aspects of this disorder of love-life in overt form, but because in milder degree it appears so frequently in neurotics. In this connection it comes specially to prominence

¹ *Vide Bibliog.* 4, 6, 7, 10, 13, 16, 21, 111, 115, 117, 119, 120, 142, 143, 151, 176, 200, 204, 226, 251, 293, 294, 295, 397, 400, 467, 481.

² The first psycho-analytical paper on this subject is by Rank, “Ein Beitrag z. Narcissismus,” 1911, *Jahrbuch*, Bd. III, 401. It is mentioned in the Schreber case, but not given special examination. The term was coined by Havelock Ellis, 1907. See *Psychology of Sex*, I, p. 206, for case histories illustrating this tendency, also Sadger, *Jahrb.* VI, 311.

³ *Jahrbuch*, VI, pp. 1-24; *Sammlung*, IV. *Gesammelte Schriften*, VI, pp. 155-187; *Collected Papers*, IV, pp. 30-59.

because it is a hindrance to progress in psycho-analytical work, that is in those cases where there is a preponderating amount of self-love or absorption in the self, it is observed that there is a diminished capacity for transference love to the physician. The theory that love can be shifted about from external objects to the ego and back again to objects had been put forward by Abraham in his papers on dementia praecox. If the charge of energy is directed to or upon the ego (the self) it is called ego-libido, if to objects in the outer world, object-libido; this does not imply a change in the essential character of the libido but only in its object. The reciprocity of ego- and object-libido is clearly seen not only in analysis but in the normal in cases of organic illness. In the condition of physical pain the patient relinquishes his interest in outside objects, his capacity for object-love diminishes and he becomes more selfish. Ferenczi¹ goes so far as to say that the flow of libidinal energy to the site of injury may play a regular part in the healing of organic wounds; by this he does not mean that the libidinal energy is a substance but a quantity of something in the psychical system which energizes the presentation of the bodily part, and that this produces physical effects useful in healing. It is, in Ferenczi's term², if I understand him correctly, a genitalization of the wound, probably associated with an increased vascularization or tumescence and accompanied by peculiar sensations.

According to the theory of sexual development, at the final stage the libido is concentrated on the genital, which takes over the erotogenic functions of the other zones. Applying this notion to the case of organic illness we surmise that an explanation is now found for the 'desexualizing' influence of many bodily disorders, i.e. the libido has found a new distribution (within the self) and the sexual energy no longer clamours for genital expression (with an external object). It is no great step to include *hypochondria* in this scheme of libidinal distribution and to explain it as a concentration of the libido upon an internal organ, which thereupon becomes painful because of the impossibility or difficulty of erotic discharge (detumescence). If this be true we should find an inverse ratio between the liability to hypochondria and capacity for transference, i.e. we shall not find hypochondria prominently, if at all, in hysteria and obsessional neurosis (transference neuroses) but probably in prominence in dementia praecox, paranoia and manic-depressive disease, which are characterized by a diminished capacity for object-love³.

What is the relationship between the narcissism of sexual perversion on the one hand and the phenomena of hypochondria and the self-centredness of organic illness on the other? At the root of them all lies an erotic activity in relation to the self, to the patient's own body or mind or personality; but this erotic activity is not autoerotic. The distinction at first appears to be a subtle one: in the earliest autoerotic activities of childhood the zones of the body have an autonomous character, they have no sexual object, no abiding relation to any person, they are simply to be described as stimulation of

¹ "Disease- or Patho-neuroses," translated in *Further Contributions to the Theory and Technique of Psycho-Analysis* (London, 1926, Institute of Psycho-Analysis) and "The Acceptance of Unpleasant Ideas," *idem*, p. 375 (also in *Int. Journ. of Psycho-analysis*, vii, p. 320).

² "Disease- or Patho-neuroses," p. 85.

³ This argument is worked out in detail in a paper by Ferenczi with the rather paradoxical title, "The Psycho-Analysis of a Case of Hysterical Hypochondria," *Further Contributions to the Theory and Technique of Psycho-Analysis*, chap. 10, and again in "Disease- or Patho-neuroses."

erotogenic parts of the body, and the stimulation of one zone does not lead to stimulation of all. When unification of the sexual impulse occurs the infant takes its own body as the loved object; something has been added to autoerotism to make narcissism, viz. unification of impulses and a love object. [It is possible that this unification is dependent on a certain degree of ego as distinct from libido development.]

The word 'love' is usually taken to imply a certain relationship to another person, though the use of the term self-love is a warning against a too narrow interpretation. In ordinary usage this self-love is generally assumed to be of a non-sensual character, a 'Platonic' attitude to self in which, in the Freudian terminology, only aim-inhibited impulses are experienced. The manifestations of autoerotism have not escaped general observation but these have not been worked into the fabric of the individual love-life, in the first place because they have been (unwarrantably) assumed to be a phenomenon of adolescence and later life, and secondly, because they have been classed too much as wicked physical acts. Indeed the popular conception has erred—as it seems to the Freudian—in classing the phenomena of 'self-gratification' as physical, as reflex acts with no psychic participation, and those of self-love as psychical, ignoring the accompanying erotic element. In the perversion the erotic element in self-love is obvious for two reasons, first, there are physical manifestations of sexual activity, secondly, this form of gratification appears to take the place of erotic object-love. In normal persons there is often found not indeed this substitution of self-love for object-love but a mixture of the two; this is manifested in the choice of object taken as a lover¹.

To explain the psycho-analytical theory of narcissism it will be necessary to go into more detail than a survey would seem to warrant, but the importance of the hypothesis demands a full summary. The following account is a compilation from the literature, not taken from any one paper, but is a combination of many, but the writer believes it to represent a correct and coherent summary of widely held views.

The development of the adult libidinal organization can be traced far back by observation, though not quite to its beginnings; hypotheses are needed to bridge some gaps in the early stages. In making these there is no pretence that they are based on observation, they are assumptions made for the purpose of establishing certain starting points, and they will for brevity be put as dogmatic statements. In the womb the child has no object relationships, its ego-needs are provided, nourishment, warmth and an absence or minimum of stimulation, in a word, there is little for the psychical apparatus

¹ A person may make a choice of love object:

(I) *According to the narcissistic type:*

- (a) What he is himself (actually himself) [e.g. a person of the same sex, occupation, race, etc.].
- (b) What he once was [e.g. a child, youth, an 'innocent,' etc.].
- (c) What he would like to be [i.e. an ideal of himself, a leader, hero, a person specially endowed with some outstanding attribute of strength, intellect, virtue, etc.].
- (d) Someone who was once part of himself [e.g. a child of his body—especially strong in the case of women].

(II) *According to the anaclitic type:*

- (a) The woman who tends [e.g. mothers, nurses, etc.].
- (b) The man who protects [e.g. father substitutes, princes, soldiers, etc.].

Table taken from Freud's "On Narcissism: An Introduction," *Collected Papers*, iv, p. 47. Notes in square brackets are added by the present writer.

to do, for this apparatus only acts when stimulated. Libidinal impulses may exist, if they do, the probable outlet for discharge is by general muscular movements (the late Dr Hug-Hellmuth, verbal communication). After birth there are definite and strong ego-needs, those of self-preservation. The assumption is that there is libidinal pleasure attaching to the act of self-preservation (sucking), and that this fusion of instincts is made possible by an erotogenic property of the mouth zone. The erotic property of any of the zones is comparable to an itching (a phenomenon of which practically nothing is known), and as with any other itch appropriate stimulation relieves the 'tension.' Whether the 'itching' is a state of tumescence, or a state of excitability in the nerve endings, or something else, is not known, and for the present purpose is immaterial, but it is (a) localized, (b) periodical, (c) relieved by stimulation of an appropriate kind. The assumption is made that the persistence of the recurring excitability is due to the erotic part of instinctual life, i.e. it is a component of the sex-instinct, in this case centred in the mouth. In this way sucking may be regarded as a sexual activity but there is not at first a sexual partner, or rather the other person (mother, nurse) is not perceived as an object of erotic desire¹. The sucking relieves the local erotic excitability without an accompanying love relation to the outer world, it is autoerotic. But this is only for the first days or weeks of life. The stages to object-relationship are imagined to be as follows: At first the nipple is not conceived by the baby as an external object but as a part of the self²; when the itch-sensation or whatever it is occurs, it is relieved by stimulation from a solid object, the tongue, the thumb or the nipple, the last alone having the power to eliminate at the same time the craving of hunger which belongs to the self-preservative instincts. Smelling is probably at an early date related to the activity at the nipple, this is the prototype of all intellectual activity (Ferenczi)—in that an early discernment is made through it of what *will* be satisfying—nipple distinguished from 'comforter,' etc. Visual perceptions play a part, too, but less than smell at first, perhaps because babies are often fed in the half dark and are usually muffled up. Thus there are three groups of sensory stimuli, buccal-tactile and taste, visual, and olfactory, associated with the presentations from the outer world, and two groups of presentations from within, the instinctual 'needs' of self-preservation and those of the libido. Just as the baby does not at first distinguish the nipple from itself, so it is quite possible it does not recognize the discomfort of hunger as belonging to itself. It builds up an elementary system of thought processes on the pattern of Pleasurable-Not-pleasurable, and associates the pleasurable with those parts of itself which furnish the pleasure. It is possible on this line of argument that a sucked thumb may be at one time regarded as part of the Pleasure-Self series, when it temporarily satisfies libido, and at another time as part of the Not-pleasurable (not-self) series, when it fails to satisfy the hunger. This is, of course, a concept of the self as a body-self, a bodily attribute, not the socialized self-conscious part of the self which later comes into great prominence.

¹ The nipple is the nearest conceivable thing to an *object* to a child in the first days of life, its smell and tactile qualities doubtless exert an 'attraction' but for reasons to be given later it is not an external object in the psycho-analytical meaning of the term.

² Urine is an object external to the body to a physiologist but is consciously regarded by many adults as an internal object, part of themselves, till voided—it is necessary to gain, or regain, a *psychological* view of the elementary bodily processes in order to follow these theories.

Other zones than the mouth are endowed with this kind of erotism, in each case the problem of the relation of zone to stimulating object is a special one; e.g. the anal zone (which includes the lower part of the rectum) is stimulated by the faeces, to which it reacts by peristaltic movements reflexly, the genitals are stimulated by friction in washing, etc. at an early date, later by friction of the hand. These zones are 'charged' or cathected with libido, and the 'itching' so produced leads to the organism's orienting itself to the outer world, in order, so to speak, that it may be scratched. Now one part of the body, now another, lays claim to the pathways of motility for this purpose; but the zones though autonomous have some intercommunication, i.e. the stimulation of one excites the erogenicity of the others¹. The presentation of the self is distinguished from that of an outer object by three features, first, its continuity, second, the confluence of pleasurable experiences in different parts, and lastly, a certain *immediacy* in pleasurable experiences. The outer world includes what is the contrary of these, namely, what is impermanent, lacking in confluence of pleasurable experience, and immediate only in relation to painful experience (what is not pleasurable, is not a Me-part of experience).

While this process is going on in regard to immediate personal experiences the ego activities of self-preservation are testing the outer world in their fashion, sorting out the visual, auditory, olfactory, tactile memory images into those combinations which recur with pleasurable results and those which do not. Thus on both sides, the bodily or erotic and let us say the intellectual, the inner and outer world is being tested by the touchstone of pleasure; just as the erotic impulses 'leaned on' the egoistic (the self-preservative) in the first place, so the egoistic were stimulated particularly by the erotic in the early days. What was pleasurable physically was memorable—a state of affairs from which no one entirely escapes. These two things have to be brought together and compared, first, the peculiar way in which erotic excitations pass or overflow from one zone to another, thus linking up the presentations of bodily erotism in different parts of the body by temporal association, and second, the character of the intellectual activity that combines presentations according to features which persist in spite of superficial complexities, e.g. the power of *recognizing* the whole from a part or number of parts. The former is a contribution from psycho-analysis, the latter is not in the field of psycho-analysis at all but of general psychology. So it comes about that there are in the early days of mental life two *Weltanschauungen*, a libidinal one almost wholly controlled by the pleasure-principle, and an egoistic one guided to some extent by pleasure yet also responsive to the dictates of the unchanging outer world. In the former case the criterion is that the object shall be a source of pleasure (in which case it is included in the category of pleasure-objects and is introjected, forming a part of the Pleasure-Ego), in the latter case that it shall have a constant set of features; in the former the pleasure-objects (owing to the overflow of excitations above mentioned) become more and more closely associated with the body as a whole.

Taking the former feature as a starting point of further speculation, it is apparent that the increasing experience of confluence of erotic excitation from the zones together with an increasing experience of the body from tactile stimulation must engender a conception of the bodily ego as a unified organism of firmer structure than presentations from the outer world, but the bound-

¹ "After being at the breast the infant generally empties its bladder: there are therefore connections." Staercke, *Int. Journ. of P.-A.* II, p. 190.

daries of this bodily ego are not necessarily the same as those drawn by the adult. Mention has already been made of the inclusion of the nipple in the self, but it was not made clear how the separation of nipple from the self could occur conceptually. It comes about through frustration and loss. If the nipple was always at hand to relieve hunger and still the erotic itch of the mouth, it would never be perceived as external, but it is an organ which is withdrawn and which finally is not provided at all. It does not obey the child's wish and appear when wanted, nor give all he asks. An association is formed between pleasure and frustration: what gives pleasure now cannot be relied on to give pleasure indefinitely, a deprivation follows pleasure. This association is of the greatest importance for the development of the mind, first, because it forces the boundaries of the self to be drawn on a reality-basis and not on a pleasure-basis, second, it causes the refractory object to become the centre of mental activity (testing and distinguishing the real from the phantasied), third, it may be a factor in producing a shifting of the chief seat of libidinal cathexis to another erotogenic zone and thus giving a new (and so more varied) orientation of the ego to the outer world¹.

So much for the mouth at the moment. The next zone of importance is the anus whose erotogenicity follows in time and often even exceeds it in importance. In certain aspects of their relationships the stool is to the anus what the nipple is to the mouth: (a) the nipple and stool represent solid stimulating bodies; (b) the child in each case changes its mode of behaviour, from a passive phase in which it experiences sensations and then leaves the rest to reflex action, sucking rhythm in the one case and defaecation in the other, to a later active phase of predominantly muscular action, biting and anal-retention respectively; (c) in both cases the stimulating object (nipple, stool) is at first (and all the time in the unconscious) felt to be a part of the self. Now let us turn to the aspects wherein the anal and the mouth zone differ in the activities and object relationships; (i) in the mouth activity the mother or nurse is predominantly passive, in the anal the child is coaxed and persuaded or even 'forced' to take the active rôle (to defaecate) and is rewarded with praise and love when it is obedient, i.e. the mother or nurse is definitely active; (ii) the child, being older when the education of the anal sphincter occurs, has already a more consolidated notion of the mother (nurse)-presentation than in the oral stage and has passed on to her part of the libidinal cathexis formerly belonging to that part which had been once felt to be common to both, the nipple; (iii) more than in the mouth stage the anal stage is characterized by hate, for the child is forced to abandon a physical pleasure and to renounce the gratification at some stage of its crescendo, it has also to tolerate an interference with an activity that is to a high degree narcissistic; (iv) a conflict arises at the anal stage perhaps more sharply than at the oral between two different kinds of object relationships—love for a part of the self (faeces) and love or hostility for another person².

¹ Libidinal deprivation may explain the shifting of cathexis to a part of the psychical apparatus which hardly warrants the name 'zone' but which may by analogy be called one, viz. *the central nervous system as it is conceived by the unconscious*. The logical conclusion of this bold hypothesis is the concept of a polarity of narcissistic interest in the genital and the brain (intellect), with a reciprocity in the amounts of cathexis.

² It is doubtful whether at this age, say about 9 months, the child attributes to the mother that unity of presentations which later experience affords. It is certain the small suckling does not; to him the mother is the background of a nipple and a mobile adjunct of a chamber-pot. The outlook on the world is dominated by physical needs.

This changing attitude to the outer world is a counterpart to a change in the ego, namely, an 'incorporating' stage in psychic activity, a phase of intense introjection, and later in the anal stage an ejecting (rejecting, hostile) phase, followed by a phase of retention and mastery of internal objects (faeces) and of external objects (toys, etc.). The last phase of infantile development (the phallic) occurs when the penis (clitoris) is the seat of the highest physical pleasure. By this time the child is able to comprehend the persons in the outer world as unified objects, having individual shape and emotional continuity and consistence to a far greater extent than in the previous stages. When the child now feels in an erotic mood in regard to a particular person it experiences a phallic (*i.e.* penis or clitoris) stimulation and may have an erection of the part, whereas in an earlier stage it would find physical outlet for intense erotic emotion by urination, defaecation or vomiting, *i.e.* the physical accompaniment of orgasm is at the earlier stages not ejection of sexual substance on crisis followed by detumescence but ejection of the contents of the alimentary viscera. In earlier stages the important persons in the outer world were associated with the functions of mouth or anus, they now are related to the child's genital, the erotic contact with external objects is through the genital zone, which has absorbed to itself the 'object capacity' of the other zones and by the unification has provided a more perfect instrument of erotic gratification, not least because *in exercising the erotic function the other organs are left to perform their physiological function undisturbed* (Ferenczi).

The absorption of erogenicity into the genital and devolution of the same from the other organs gives the penis (clitoris) a special position in the bodily economy. By its erotic communication with other parts and its capacity for discharge of libidinal excitations it becomes identified with the body as a whole. The separation of the functions of pleasure and utility into the departments of genital and soma affords a new possibility for libidinal object relationships: the penis (or clitoris) may absorb all object cathexis or it may serve as the conduit of all object cathexes and thus perform an erotic service to the body by ridding it of libidinal tension. Whether by any of these means, or by a combination of them, or by some other process, the genitals acquire a power in the unconscious to represent the body as a whole, to represent the ego. An example of this is found in the unconscious attitude to death, which, to the unconscious part of the mind, is inconceivable in regard to one's own person; the nearest approach to it is the thought of castration. Castration of all injuries and threats exerts the profoundest effect on the mind, for in this loss there is an injury both to the egoistic and to the libidinal aspects of existence, the latter directly, the former by the identifications just mentioned between the body as a whole and the genital. But it should not be thought that the phenomenon of a devastating loss such as castration can occur only in connection with the genitals; a phenomenon of essentially similar nature can occur earlier in connection with the loss of the nipple and of the faeces. The castration element enters into these losses because the nipple and faeces are regarded as a part of the self, so that a part of the self is being removed when these are taken away¹, they are valued (loved) because they are felt to be a part of the self. Such non-genital 'castrations' have been given various names, 'precastration narcissistic wounds or deprivations' is, though

¹ And what is more they are taken away at the very moment when they are affording great erotic gratification.

cumbersome, perhaps the best. The introduction of the word narcissistic is a reminder that no external object relationship is implied. The liability to strong castration-reactions does not occur at one sharply defined time but is an epoch in the development of the ego and the libido in which ego-instincts are united with sexual instincts to make *narcissistic* instincts. The normal individual outgrows the liability to castration shocks to a greater or less extent, the psychotic does not.

Returning to Narcissism, let us discuss the course given to psychical development of the ego-libido, which, let me repeat, is libido attached to the ego, not arising from it. The first libidinal cathexes are directed to the ego, which as we have seen is not sharply limited to the bodily ego but includes other objects; later the libido is attached to two kinds of objects, the self and external objects, and becomes narcissistic libido and object libido respectively. The distinction, however, in this case as in the former one, must not be too sharply drawn on physical lines, because some persons are not loved *for their own sakes* so much as for their *likeness to the self*. At the stage when all or practically all libidinal cathexis is upon the self it is assumed that there is a concomitant over-estimation of the self. Put in other terms, we value what we love and we love what affords gratification, so when the self affords inordinate gratification it is inordinately loved. A child cannot go far along the path of life without finding that the gratification of its instincts and wishes leads to a conflict with its parents. It is assumed that the relinquishing of one type of gratification is not absolute and unconditioned but that there are compensations by a change in the type of gratification, or rather by a change in the 'organ-gratification' used in the widest sense. Just as the libidinal gratification of the mouth zone was not extinguished but transferred to a great extent to another zone, so in this case the organ-gratification is not entirely renounced under pressure of nursery education and nursery morality but transferred to the newly functioning unit—the self. There are two possible modes of gratification, the primitive way by direct organ-pleasure or the more indirect one by so comporting the body as a whole that it shall not come into conflict with the outer world (parents). The child forms an *ideal* of its behaviour from the parental injunctions and feels a psychical harmony and peace if it lives according to that ideal, and the gratification of this ideal absorbs the gratifications of the organ zones. The analogy of the genital zone's absorption of the other organ erotisms may be pointed out. This explains, in part at any rate, the development of the ego-ideal from the narcissistic libido and furnishes a clue to the infatuation with their own ideals which many persons demonstrate, *i.e.* the transference to *their own ego-ideal* of the primitive *over-estimation of the self*, unwilling to forego entirely the thought of the self being perfect, this perfection is attributed to the ideal which is retained as a part of the self and is seldom or never criticized!

On an earlier page the theory was put forward that at one stage of development what was pleasant was part of the Me-world and what was unpleasant was part of the Not-Me-world; it may therefore seem to be puzzling that a child should accept so unpleasant a thing as a criticizing person into his psychical system at all. The solution of this problem is not difficult, it lies in the fact that the child has in the meantime developed an affection for its parents—the libidinal ties have been formed where the ego-needs (protection, nourishment, etc.) were strongest, so it comes about that it is primarily love for the parents and their surrogates which makes it well nigh impossible

for the child to neglect their injunctions and it is at bottom the force of love which causes it to renounce its sensual pleasures—love and the *fear* of losing the protecting loved one. The nucleus of the ego-ideal is laid down by the influence of the parents upon the developing ego of the child but the process of ego-ideal formation does not stop with them but is carried on by parent substitutes, by school teachers, superiors in business relationships, civic affairs, and so on; the setting up of the ego-ideal is essentially a product of the parent-child relationship, whatever its later developments.

Putting these concepts into more technical terms, the parent is *introjected* into the ego for the particular purpose of restraining the instinctual impulses, the voice of the parents, which is of course external, becomes established as an internal admonishing influence, the vigilance which was once external is now internal. This helps to explain puzzling phenomena in the psychoses, viz. the delusion of being watched, the hearing of admonishing voices and the incessant criticism which some complain of. We can be reasonably certain, though our patients are not, that their self-reproaches for frightful crimes are in fact misplaced, as adults they have done no heinous wrong, but their ego-ideal (introjected parents) behaves relentlessly to the ego with the tyranny of a harsh parent, and the weak ego submits. Under internal duress the patient announces that he has done wrong, but cannot produce the necessary evidence; sometimes he trumps up trivial charges against himself but these are secondary not primary in importance, they are 'rationalizations' employed to fill a logical gap in consciousness.

It is always important when considering the application of the libido theory to psychical development or to psychopathology to consider it in regard to its distribution, for instance, in a perversion, a neurosis or an everyday action, to ask what amount of libido is gratified along primitive auto-erotic channels, what amount is devoted to object-relationships and what is absorbed and re-utilised in the form of ego-libido. The question should be asked even if it cannot be completely answered.

In the case of the ego-ideal we are confronted with exceptional difficulties, which are discussed at length in Jones's *The Origin and Structure of the Super-Ego*, but it may be said with a measure of confidence that the ego-ideal is a modification of a part of the ego or a modification of an ego function in which the individual can retain his self-love and at the same time keep the affection of his parents, the libido utilized in the ego-ideal activity is thus a combination of narcissistic-libido and object-libido (the latter being modified).

In briefest outline of the foregoing paragraphs we must distinguish two concepts, primary and secondary narcissism. The former is regarded as the state of complete self-satisfaction which does only and can only exist in the undisturbed intra-uterine state and after birth in dreamless sleep, which may be defined as a state in which there are no object-cathexes; the latter is again a term referring to distribution of libidinal cathexis and may be defined as a state in which object-cathexis is limited by a condition, namely, that the object cathected shall be the self, it belongs therefore to the stage of object-less libidinal distribution in respect to the absence of an external object but to the stage of object-libidinal distribution in that there is unity of aim of component impulses, and because the object (the self) has the capacity of absorbing libidinal cathexes in very varying amounts from the least to the greatest without making an alteration of the type of relationship. The ego-ideal is a device, so to speak, for maintaining narcissism which is in essentials

inflexible in the face of a changing external environment that calls for modification of libidinal attachments, it is an adaptation of self-love to enable the self-lover to modify himself to his surroundings, it is a 'technique' for preserving a primitive impulse without the individual losing his capacity for survival; finally, it reveals the amazing capacity of the psychical apparatus to utilise as instruments of culture outgrown or primitive impulses which at first sight might be thought to be detrimental to developmental progress.

§ 7. *Modification of the Feeling of Omnipotence*¹.

It is breaking the chronological order of the publications to leave this subject to Part II for discussion, for the first adumbrations appeared as early as 1900 in Freud's *Interpretation of Dreams*, and it was clearly set out by Ferenczi² in 1913. But these topics do not sift themselves out neatly and they must be ordered according to some plan, disturbing the chronological arrangement as little as possible.

"By means of a kind of empathy into the infantile mind," Ferenczi arrived at the hypothesis that a child kept from pain would regard existence as a unity, the discrimination between 'good' and 'bad' coming only with the advent of pain. The mental state would be that of *unconditioned omnipotence*, and when pain and disappointments arrived the sense of omnipotence would be given up only by slow degrees. Defining omnipotence as the feeling that one has all that one wants and has nothing left to wish for, Ferenczi argues that the child in the foetal state has less to wish to change in its environment than any creature imaginable, and if we are justified in attributing to the foetus any mental processes at all we could in its case hardly call megalomania a delusion. Birth is a violent disturbance of this state of bliss, it interrupts physical composure and throws suddenly upon the baby a number of drastic physical needs which cannot but stir up its mental processes. A thoughtful nurse endeavours to give it as much of its earlier peace as possible, keeps it warm, softens the force of sound and light stimuli, puts it from time to time in a warm bath³ and gives it regular food. The unconditioned omnipotence is broken into by wants. It is assumed that the first attempt at 'satisfying' these wants is by hallucination, i.e. the wish is represented as fulfilled—thus in this second stage the only condition required for the fulfilment of wishes is to depict them as fulfilled; but this is unsatisfactory, the wants persist, the child cries. If when this happens the nurse arrives and supplies its needs (food, rearrangement of clothes or what not) it can but imagine that the cry or the gesture has produced the effect. This third is the stage of *magical gesture* by which the feeling of omnipotence is restored.

These three stages are represented in psychopathology: the first is the extreme withdrawal from all outer reality which is presumed to occur in some dementia praecox patients in the waking state, and in all of us when in dreamless sleep, the second is the state of dreaming, the third is the magical

¹ *Vide Bibliog.* 111, 115, 135, 137, 139, 163, 166, 172, 302, 367.

² *Stages in the Development of a Sense of Reality.*

³ Perhaps the warm bath treatment of manic crises may derive some of its effect from this re-establishment of the infantile and indeed pre-natal state. Stoddart [469] suggested that the reason the maniacal patients undress is because they feel their clothes an intolerable burden owing to a sensitive skin. I can see another reason—infantile exhibitionism—for their doing this, but if the maniac's skin is so sensitive the warm bath would be doubly soothing.

gestures, the 'power-movements' of the praecox patient, possibly of the ticqueur and of the obsessional who performs gestures and grimaces when doing such things as cursing, blessing, praying, etc. With the increase in the complexity of the wants there goes a necessary increase in the complexity of the *condition*, but the latter never 'catches up,' an increasing number of wants always go unfulfilled. The early stage, during which all pleasant experiences are incorporated in the ego, Ferenczi calls the *Introjection Phase*, later, when the child recognizes that there are things which do not obey his will and that thoughts alone will not change the outer world, comes the *Projection Phase*; the latter is of course nearer to a perception of objective reality. The earlier phase is the prototype of *animism*, the perception in the outer world of the image of his own corporeality is the prototype of *symbolism*, the stage in which there is submission to the outer world is the *scientific* stage.

Speech gives the effect of exercising a greater influence on the outer world of persons and the conditioning of omnipotence by speech corresponds to the period in infancy of magical thoughts and magical words. This is found in clearest fashion in obsessional neurotics and also in the melancholic in remissions, and in the paraphrenics. Magical words appear in almost all mystical cults and lie at the bottom of belief in certain prayers and curses.

In science the omnipotence is dissolved into mere 'conditions,' determinism rules, and the illusion of omnipotence is completely relinquished—or should be.

Thus far the egoistic impulses alone have been considered, but the feeling of omnipotence is experienced in the sexual sphere also. The analogies are close. The giving up of autoerotic activities that are objectless for a dependence on an object for satisfaction is a parallel development to that of the ego in its relation to the external world. Narcissism belongs to the autoerotic-omnipotent stage, object-love is the counterpart to conditionalism.

§ 8. *Developmental Stages of the Libido*¹.

The discussion of Narcissism has already made a serious inroad on this topic, it is now only necessary to bring out certain points more fully. As in the previous paragraphs the treatment will be explanatory rather than in the nature of a *précis*.

The first application to clinical conditions of the concept of *stages* in libidinal development is in Freud's paper in 1908 on Character and Anal Erotism. He found certain types of behaviour (ego activities) were to be associated with erotic gratification at zones of the body other than the genital, and these behaviour groupings can be more or less sharply separated from one another. These characteristics could be traced throughout the patient's life and the attitude to objects was found to be essentially the same as that to the proper stimulant to the zone in question. The matter might be put figuratively by saying that the individual orients himself to the world so that it shall give him gratification at the presenting zone in different ways at different times, according to the zone presented. First he presents his mouth

¹ Based primarily on Abraham's "Versuch einer Entwicklungsgeschichte der Libido auf Grund der Psychoanalyse seelischer Störungen" (1), and abstracted with great lucidity by the late Dr James Glover in the *British Journal of Medical Psychology*, iv, p. 326. Reference may also be made to "Researches into the earliest pre-genital stage of Development." *Vide Bibliog.* 3, 4, 6, 9, 13, 14, 16, 212, 221, 223, 229, 247, 248, 252.

to the world, later the anus, and by this is meant not that he turns his body about but that he turns his attention to the stimuli streaming in now from one, now from another zone. This turning of the attention is an ego function but guided by the libido, a psychical function that is possibly controlled by a physical factor. The persistence of one of these ego-orientations constitutes the ego-part of a fixation at the stage of libidinal development in question, or rather the tendency to persistence constitutes the fixation. It is found that a fixation does not prohibit development beyond its particular stage but that such further development is unstable and on its being upset the relatively more stable condition at the fixation point gives the specific character to the behaviour. In a word, there is always a tendency to regress to the more stable from the unstable.

This much relates to the *aim* of the libidinal impulse, now a word about the *object*. A peculiarity of libidinal impulses is the capacity to change the object without altering the aim. An example at the anal stage will serve to illustrate this. There is one series of object-modifications relating to money¹ in which the child's desire to play with its dejecta is modified by substitution to an interest in games with mud and plasticine, then with sand (dehydration, deodorization, due to reaction-formation against the erotic enjoyment of moisture and smell), then with marbles, stones, later with coins and negotiable securities. The criterion observed by the ego in these cases appears to be an identity in particular qualities of the object, consistence, colour, etc., these qualities being taken *one or only a few at a time, the object is not treated as a whole nor in relation to its own environment*—not till the genital stage is reached². This by way of preliminary to a consideration of the various modes of behaviour to objects in the different stages of development.

Abraham divides each of the three stages already considered (oral, anal and genital) into I an early, and II a late oral, III early, and IV late anal, V a phallic, and VI a genital. Oral and anal erotism display two opposed tendencies, 'positive' and 'negative.' In the 'positive' oral stage the tendency is for the object to be swallowed, to be retained, in the 'negative' stage the child wishes to disturb the object, to do something to it, by biting it destroys the object. In the 'negative' anal stage it desires to expel the object, to reject; in the 'positive' to do something to it, to master it, to exercise control. The 'positive' stages are seen in I and IV, the 'negative' in II and III. There is thus a period in which the child's attitude to objects is primarily 'negative,' destructive, rejecting, interposed between an objectless stage which has elements of a 'positive' attitude in it, and the final stages (V and VI) when the attitude is increasingly and finally exclusively 'positive.'

One of the chief features of Abraham's paper is the inclusion of a new stage in the development of object-relationships. Before only the autoerotic, narcissistic and alloerotic had been discussed. He included between the last two a stage of part-love, *i.e.* the libidinal attachment was not to all the presentations of the object but only to one or a few of them. This theory had

¹ See in this connection Ferenczi, *The Ontogenesis of the Interest in Money*.

² It may be urged that there is no likeness in consistence between mud and negotiable securities. This is undeniable, but there is here a change in form and consistence by gradual replacement, the consistence being carried over from faeces to mud and plasticine, the odourlessness from the latter through stones to coins, etc., one particular quality serves for a time and gives place to another without an *integration* of the qualities. The *aim* does not change, it is in this case to possess, to manipulate, to store or hoard.

been forced on him from studies of hysteria, kleptomania, fetichism, paranoia and manic-depressive disease.

§ 9. *Melancholia*¹.

- (a) *The relation of Grief to Melancholy.*
- (b) *The relation of Obsessional Neurosis to Melancholia.*
- (c) *The Narcissism of the Melancholic.*
- (d) *Melancholia and Mania.*
- (e) *The rôle of oral libido in the melancholic.*
- (f) *Efforts at Self-Cure.*
- (g) *The end of the attack.*

(a) *The relation of Grief to Melancholy.* Grief is a mental consequence of the loss of a loved object. This is usually a person but may be something inanimate such as a house or a mother-country or something abstract such as an ideal. The object lost is present to consciousness and the conscious orientation to the object is never abandoned, however deep the grief, furthermore there is no ambivalence, there are no self-reproaches, but only repining. The 'process' or 'mechanism' of grief lasts a variable but restricted time during which there is a greater or less degree of painful dejection, loss of interest in the outer world, a temporary loss of capacity to love and a variable amount of inhibition of life's activities.

Melancholia has some points of resemblance to grief but what are of special interest are the differences: the loss is not necessarily a 'real' loss, *i.e.* not a death or separation or loss of liberty or the like, the object lost is not present in consciousness, the 'process' is not necessarily temporary, there is a high degree of ambivalence, and, most important of all, in melancholia but not in grief there is a severe depreciation of the self-feelings. Persons suffering from grief do not revile themselves or entertain delusions of wickedness or of punishment, their world may for a time be empty but they do not feel that they have lost the capacity to love, and indeed they show that they still have this capacity by a returning interest in the world and a renewed bestowal of their love—on a new object. Once again we ask the question, where are the amounts of libido distributed when there is a loss of object cathexis? The psychoanalyst finds the differences between the distribution in grief and in melancholia to be the following: in grief the memories of the object are dealt with bit by bit, the libido after a painful struggle is detached², temporarily shifts on to the ego and then returns to the outer world; in melancholia the libido is shifted to the ego but does not return to objects in the outer world, the increased cathexis of the ego thus brought about explains two features never absent³ in melancholia—the megalomania, though this does not usually rise to the grandiloquent heights of that of the precocious dement, and the hypochondria. It also explains, or in part explains, the narcissistic element that is always present.

¹ *Vide Bibliog.* 6, 10, 17, 190, 210, 303, 305, 348, 412, 413.

² In grief there is no disturbance of the relation of the ego to the outer world, therefore there is the pressingly real absence of the loved object to compel the detachment, the process takes times but is accomplished; in melancholia the ego-outer world relations are disturbed, the process may go on indefinitely.

³ 'Never absent' is a strong phrase that may of course have to be withdrawn later; however, in criticizing it is not sufficient that these characteristics are not observable in an ordinary clinical interview, they may only appear when examination is made by a special diagnostic 'instrument'—the analytical situation.

The person suffering from grief is not afflicted with self-reproaches, and though there is a temporary increase in libidinal cathexis of the ego there is no illness. In melancholia on the other hand the ego appears to have fallen into two pieces, one raging against the other. A close examination of the reproaches shows that they are not primarily directed against the self but against some other person and become only secondarily directed against the self through identification with the person reproached. Abraham makes a distinction between the cases in which the introjected love-object plays the part of the conscience (ego-ideal) and does the attacking and uttering the reproaches, and the cases where the patient's 'own' ego-ideal so to speak reproaches and criticizes the introjected person.

It may be thought a contradiction in terms to assert that reproaches are heaped on a loved object (whether that object be introjected or not is immaterial for the moment) and it may be asked how it can come about that a loved object can be treated in that way. At the genital stage of development it is not possible but it is in the very essence of behaviour at the *anal sadistic* level.

(b) *The relation of Obsessional Neurosis to Melancholia.* In the preceding section of this paper the stages of development of the libido with the corresponding object relationships were discussed. Let us now apply this clinically. Anal erotism and sadism each have a positive and a negative tendency, to retain or to expel in the case of anal erotism, to master or to destroy in the case of sadism. One of the distinctions between the two diseases, obsessional neurosis and melancholia, in respect to instinct impulse, is to be found in the fact that in obsessional neurosis the object is retained (object cathexes are not relinquished) whereas in melancholia the object cathexes are 'given up' and there is a tendency for the object to be expelled from the libidinal system. Put in another way, the fixation point of obsessional neurosis lies in the late anal, of melancholia in the early anal or late oral stage. The dividing line between these two groups of stages, though sometimes difficult to draw in individual cases, is of the greatest importance theoretically and therapeutically, for the prognosis depends to a great measure on the amount of the libido which is represented in the fixation on one or other side of that line; it is important theoretically because it may later prove that the dividing line involves not only libidinal but concomitant ego changes of the greatest moment in the development of the individual.

This comparison between melancholia and obsessional neurosis throws light on several psychiatric problems of importance. A diagnostic doubt is liable to arise at a consultation when a severe obsessional first presents himself for an opinion and advice. The history is liable to be misleading because of the fluctuations in severity which frequently are a marked feature of the disease; furthermore, self-reproaches are met with in obsessionals, and obsessional ceremonials in melancholics. The difficulty can be overcome by undertaking not a therapeutic but diagnostic analysis which affords an insight into the capacity for transference; this, as has been said, is retained in obsessional neurosis but greatly diminished or absent in melancholia. The analysis shows in addition in particularly clear fashion the presence of hypochondriacal symptoms and usually these can be distinguished from hysterical manifestations without difficulty in analysis, true hypochondria being rare in obsessional neurosis. Most important of all, the analysis distinguishes the *self-punishing* tendency of the obsessional from the sadism directed against the introjected *object* in the melancholic.

Another problem of psychiatry is made clearer by the theoretical and descriptive comparison of the two diseases, namely, the mental condition of the melancholic during his remission. He is not really perfectly healthy but suffers from a condition which, if it is not obsessional neurosis itself, closely resembles it on superficial view, namely, the obsessional character. Put in another way, during the improvement in the melancholic his libidinal orientation undergoes an advance as regards aim from the oral stage through the late (positive) anal to the phallic; as regards his attitude to objects he loses most of his negatively toned ambivalence and can maintain a fairly satisfactory positive application of libido.

(c) *The Narcissism of the Melancholic.* A feature of melancholia which at once strikes a student who is familiar with psycho-analysis is the enormous rôle that narcissism plays in the disease. The self-love and self-centredness may take the common form of egotism and so be apparent, but it may also be disguised so that it needs special study to detect it. Thus one patient devoted nearly half an analytical hour to a description and discussion of a hair-cut. This on ordinary reckoning would be accounted simple egotism, but it was in fact particularly complicated. He had spent on that hair-cut nearly five times his usual sum. He justified it on the ground that he needed to bring himself up to his real standard. The barber looked foreign, he tried a little excellent French, to which the man modestly replied in the broken pronunciation of the English Tommy who had been in France. But he thought that by his fluency he would raise himself in the barber's eyes, and that one of the merits of education was that one could utilize occasions such as this. And the barber seemed to respect the shape of his head. He also broke out into a tirade at the amount of the bill which he had a few moments before considered not excessive for a man of his 'position.' It was an outrage, he couldn't afford it, his dependents would have to go without necessary things. Self-reproach now became apparent. He was destroying them, it was necessary to have such things but his dependents were being undone by his needs, which of course had to come first. He was selfish, in fact the most selfish person in the world, but he couldn't help it. With the smell of the barber's oil still on him and the deference still in his mind his self-reproaches went no further. A day later (during the interval he had said nothing to anyone about the affair) and without mentioning the incident specifically he referred to his wicked extravagance. It was now so morally repulsive, only the foulest sort of person, for instance a masturbator, could do such a thing as to spend a large sum on personal adornment. It was in fact the masturbation coming out in another way and he was damned before all men. Everyone could see by his act [the expensive hair-cut] that he had done other things in secret. (This may also have referred to a homosexual incident in earlier life.) He was abhorrent to himself. The world could not contain such evil, there was nothing for it but suicide. God's punishment for masturbation would come hereafter, only it would not be heavy enough; he would have to suffer here for a bit too....And much more in the same strain. He felt that in the magnitude of his self-reproach he was by ordinary accounts exaggerating, but said he had a special standard. He must be *perfect, absolutely* blameless. He asked if other people also masturbated and then at once went on to say that if they did it made no difference because they were by that fact proved imperfect and so no standard for him to judge himself by. All this is not the emptying of the ego of all its values and the heaping of them on a loved person—like

a lover's humility. The real ego is regarded as poor and miserable, to be sure, but the love has not gone out to another ego or rather to another person's ego, but to his own, or a part of his own, to a tyrannical fantastic super-ego which knows nothing of clemency or proportion. At one moment he basks in an illiterate barber's flattery and sees in it a recognition of his due; at another he is no less a person than the World's Greatest Outcast¹. The narcissistic nature of the Super-Ego has already been referred to in an earlier paragraph and will be mentioned again. It is the absorption of the libido in this part of the ego system which makes melancholics so difficult to handle in any form of psycho-therapy, particularly since the super-ego is mostly unconscious.

(d) *Melancholia and Mania*. Melancholia and Mania are associated in respect to the following points among others: (i) the same people may have both affections at different times in their lives, sometimes alternately, sometimes 'switching over' from one to the other with apparent suddenness², (ii) in both the ego plays an outstanding part in the patient's libidinal distribution and often in his manifest symptoms, though in the one case he feels ill and weak, wicked and an outcast, while in the other he feels bursting with spirits, ready for anything, a good sort of fellow and the friend of all men; (iii) in both there is an incapacity to work and to love, in melancholia work is too hard, in mania 'too easy,' in both love is a shallow thing, the former seeks it but can nowhere find it, the latter cannot stop to experience it.

To the psycho-analyst one of the most remarkable features of the change from melancholia to mania is the alteration in the functional activity of the super-ego, in the former state it makes a persistent relentless attack on the ego, in the latter state it seems to have disappeared altogether. This is a descriptive way of stating the matter that needs correction. It would be better to say that in melancholia the cathexis is transferred to the super-ego and is withdrawn from the ego, which is weakened, while the super-ego exercises its sadistic vigilance over the ego; in mania the ego is released from its former rigid control, receives the entire amount of cathexis formerly investing the super-ego and proceeds with feverish activity to long prohibited infantile gratifications. This at least is one of the possible results of the transfer of cathexis, another is megalomania of quiet type, exaltation of spirit (euphoria) without the manifestation of interest in the outer world,

¹ The incident also shows the infantile nature of libido gratification. He stroked his hair and then he sniffed his hands, this recalled a part of his lavatory ceremonial; the use of French was a part of his play with words which entered into his earliest phantasies; the fierce heat of his outburst at the amount of the bill (which was not excessive for what he had had done) revealed the sadism which later appeared in his self-accusations; the whole incident was also a revenge and a compensation for a recent petty financial extravagance of his wife. Only an individual with an infantile fixation could have behaved in this way. The ego was behaving in infantile fashion to find compensation, for an academic setback in the mumblings of a barber, and for a domestic dispute in a hair-cut. His emphasis on the persistence of the fragrance of the barber's oil may throw some light on the manner in which the ego finds its compensations for a material loss in an aesthetic sensual gain. Since he was a person with considerable natural endowments and knowledge of the world before his illness, it is hard to see how, without taking into account the infantile libidinal element in his mind, he could have been so powerfully affected by an incident in a hairdresser's saloon in the Euston Road.

² The suddenness is more apparent to casual observation than to analytic investigation. The incident at the barber's showed evidences of transition, and in another case where I could trace no regular periodicity in the cycle of events I was usually able to tell from the transference three days beforehand when the manic phase was beginning, though the patient only knew a few hours beforehand that something was impending.

which type results being determined presumably by the amount of object-cathexis existing at the time. The manic phase does not eliminate the hypochondria, and indeed on theoretical grounds one would not expect this to happen, but its expression is masked by the lack of subtlety in manner and phrase which frequently accompanies the disease.

The melancholic phase is characterized by mental pain of the acutest kind, which is borne by the ego; when the manic phase comes there is sudden release of strain and the patient appears to be joyous. The change may be put in terms of the difference in tension or hostility between the super-ego and ego. Probably the capacity of the ego to tolerate the super-ego is widely different in the two states. That the condition of the ego seems to be important is shown by a further fact, that mania is much more infantile in character, or rather that the manic's ego activities, as well as his libidinal, are more infantile. To give an illustration: in the depressed phase a patient had prospect of a rise in the business world but feared that he was emotionally incapable of doing the extra work involved; he saw his career clearly, the present, past and future, and was aware of intellectual proficiency. Later in the manic phase he decided to cling to his present job, dwelt on its trivial pleasantnesses and behaved childishly about the past in retrospect. As to the future: "I don't give a damn what happens. I'll stick where I am till Hell freezes." Comprehension of surroundings is of course in melancholia impaired in most cases to a greater or less degree, and overcast with uncertainty and portents of evil, but it retains its character of comprehending (bringing elements together) though the total range is restricted. In mania this is not so, here details, isolated elements or small combinations seem to function in the mind where larger combinations function in depression. [I have not found this point mentioned in the literature and intend to refer to it in more detail in another paper.] It may be that the difference lies in the ego alone or in some non-ego change in the ego-super-ego relationship; at present it cannot be decided. Attention may therefore be directed to another aspect of the problem.

There is strong clinical evidence that in depression a person is being attacked; this person, whom the patient formerly loved, has been introjected (absorbed into the ego system) and in this new psychical position is the object of hostility. In hitting the object the patient hurts himself. The ambivalence to the object is transferred too; the adoration and the loathing. But what happens in the manic phase to the introjected object? Psycho-analysis is not yet ready for an answer to this, but it seems that sometimes the object cathexis is given up and the patient is in a measure objectless.

Perhaps the most striking characteristic difference is the immense sense of guilt in the depressed phase and the guilt-free state in the manic. Sin in the one case, surpassing the mercy of God to forgive, and utter indifference to moral values in the other. What is this sin?

(e) *The rôle of oral libido in the melancholic.* A patient came to me for consultation in a state of frightful agitation, on all sides his attention was directed to objects and situations which brought to his mind thoughts of Blood. When he got on a bus the idea came to him, "Suppose my children were in the roadway and got run over..." then he saw in his mind's eye gouts of blood on the bus wheels, rivers of blood in the road and mangled flesh. "And worse thoughts than these...I can't eat...without thinking..." he stopped. I added, "Of human flesh." "Yes, that's it, when I sit down to eat I keep on thinking that it's human flesh...my children's." His family doctor

(diagnosing this as neurasthenia) had ordered him for the sake of fresh air and exercise to dig in the garden. "But," he said to me, "when I do I think as I turn over the sods with my spade, 'It's all flesh. The entire earth must be by now made up of rotting corpses.' And while I work I feel 'It's everywhere, everywhere. Even the vegetables which grow in the soil are made of human flesh.'"

This case has been given because it represents in a peculiarly condensed and forcible way the importance of the oral fixation in melancholia. Abraham drew attention to this first; what follows is based on his papers. The oral stage is sub-divided into a passive sucking stage and an active biting stage, the former is objectless, the latter is characterized by a peculiar relation to the object (the nipple) which is no longer regarded as a part of the self but is assuming (psychically speaking, of course) an external position and is felt to be in danger of being lost, a matter of importance because it is a source of pleasure. The nipple is seized on and devoured, it is drawn into the Self-system (the pleasure Me-system) to be retained. This happens at the time of weaning when the child's jaws are beginning to function (aided by teeth) in masticating food, no longer merely rhythmically pumping it into the upper end of the gut. The bite movements are not reflex peristaltic pulsations but voluntary efforts; the real ego, consciously controlling and modifying action to meet and master the outer world, is beginning to function in the bodily and psychic economy. Heretofore the world has come to the mouth, now the mouth goes to the world. This phase is accompanied by a psychical tension and excitement which finds relief in the act of gnawing and destruction. It is not to be supposed that the destructiveness is consciously felt as it is in the case of youths who revel in it on Guy Fawkes' Day and other celebrations, it is not a pleasure in seeing a complete and meaningful structure toppling to pieces or consumed in flames, it is rather the fierce pleasure in detaching pieces that attract and then mastering them with the means at the ego's control: jaws and claws.

This, the stage of oral sadism, gives place to the 'negative' anal stage, in which the attitude to the object (now faeces) is still aggressive but the desire is to expel the object with the intention of alienating it from the psychical system. But the impulse does not run its course unchecked, for in the earlier phase the tendency to passivity persists. The child cannot change its habit in a moment, old behaviour disturbs the acquirement of a new. The pleasure to be gained at first is not solely the thrill of passing but the steady sensation of pleasure when retaining; the muscular strain in and pleasure from the sphincter is balanced against the other pleasure to experience the sensory pleasure in the passing. The stool is after all a part of the self. Thus there is ambivalence at the anal stage as at the oral. This ambivalence is evidence of an unstable ego-object relationship which we must now consider more deeply.

In the preceding paragraphs we have considered two phases of oral activity, one passive, objectless, and the other with an active destructive orientation to the object. This object was originally the nipple, which was the main thing in the suckling's world. The fixation at this stage of libido development means that there is a tendency to hark back to the infantile desire to suck and bite the nipple of the mother (the spontaneous utterances of melancholic patients show this tendency clearly enough in analysis) and that the behaviour of the patient throughout life is dominated in varying degree by those mental characteristics which belong to that phase: a sadistic attitude combined with

an overstrong tendency to introjection; the object may be changed beyond recognition, the tendency is not.

The child cannot permanently satisfy its libido at the pre-genital zones. It appears as if the libido must undergo a shifting of its concentration from one zone to another, oral, anal, genital, each being accompanied by a change in the ego, partly independent, partly dependent on the libido alterations. A little later the love-objects are no longer the self or parts of the self but those most important things in the environment—the parents. These are adored and feared, they have it in their power to give almost unconditioned happiness or to impose restrictions on pleasure to an unlimited degree. While they are loved the child is physically, mentally and morally wholly dependent on them; when they are hated, the child stands perilously alone. Obedience is rewarded by marks of their pleasure, of their love, disobedience by their displeasure, and their love is withdrawn. When this happens, the child is indeed helpless. Furthermore the parents require such extraordinary things, among others that the child shall acquire voluntary control over its “autonomic” nervous system—at least in places—that it shall defaecate at 9 a.m. and not urinate while it sleeps, that at all times it shall be celibate in thought and deed and indulge in no ‘smoking-room stories,’ ordinances which at least half the adult population would regard as ridiculous if applied to themselves (unless they had already inured themselves to obedience to them) are to be observed at the cost of parental displeasure—loss of love. It is not to be wondered at that there is a conflict in the child’s mind between an inner longing for that love and an inner hatred of the people who act against its immediate self-interest (personal pleasure as it has hitherto experienced it). There are several possible outcomes, chief among which are the following: (i) the child’s self-love may be gratified by a peculiar procedure—it identifies itself with its parents, takes their ‘you must’ (external) as ‘I must’ (internal) and so solves the external conflict by making it internal. The external injunction becomes now an internal one, and self-satisfaction (self-love) can be preserved so long as the orders are obeyed. The hostility to the interfering parent is transferred to the introjected parent (the Super-Ego) and is turned upon the self; this is where the Super-Ego gets its relentlessness, it is sadism reflected—and made less dangerous, at least to outer objects, to whom love feelings can now flow out, undisturbed by hate¹. (ii) (a way leading to abnormality). The severity of the Super-Ego may be restricted to certain specific performances and not to all of those that the parent has prohibited, the introjection of prohibitions can be isolated from one another so that the individual has a conscience (super-ego function) that operates towards one type of instinctual gratification differently from that of another without developing unification of the ‘moral character.’

From these two modes of Super-Ego formation result two different types of Super-Ego; in the one there is integration of the prohibiting tendencies, in the other there is not. The latter is for our present purpose specially important because it is correlated with unintegrated libidinal gratifications, i.e. those which have given rise to fixation and have (by repression) acquired to a certain extent an independent existence in the psychical economy. In the case of the future melancholic the process appears to be as follows: the

¹ Thus the impulse of sadism retains its sexuality when directed upon the self in melancholics, but is aim-inhibited when it is turned upon outer objects—another evidence of the auto-erotic feature of the disease.

individual being greatly desirous must check the strong libidinal tendency to get erotic gratification by sucking the loved object and devouring it. This is not a simple forward movement of love, he also hates it and wants sadistically to destroy it, but the sadism is turned against the self via the Super-Ego, so he punishes himself for the cruel lust by making painful the very source of his pleasure. His appetite is altered because he feels himself to be a cannibal-brute to the very objects he loves. He is right, of course, he has these desires, his Super-Ego with its usual precision blames him for his deepest ('most repressed') wish, and hauls it up before his eyes, as it were, as a perverted taint in his character. The ego of the patient, not comprehending the presence or the source of the desire, says, "It's horrifying to me to have such thoughts, they are no part of me," reckoning as Me only what is conscious. The Super-Ego, however, knows more of the instinctual desires than does the ego and sits in harsh judgment.

(f) *Efforts at Self-Cure.* It is necessary to know what has caused neurotic illness before we can estimate how far our efforts or the patient's are likely to alter his condition in the right direction. Among the causes of neurotic illness¹ *frustration* holds the most prominent place. This is an external factor and occurs when, after deprivation of an object of gratification, there is no substitute. The effect of frustration is to dam up the libido so that it creates a state of uneasiness; this is relieved either by a transposition into energy directed to the outer world which is made finally to give the actual satisfaction required, or else the libidinal satisfaction is deflected from its erotic goal and sublimated. The danger in either case is that the person will turn from reality and use the psychical energy whose external outlet is blocked in re-animating old phantasies and regressive aims.

Two other causes are the *inability to adapt to reality*, which may precipitate neurosis at any age, and *inhibition in development*, for the action of which a certain stage of development is required². In more pronounced cases, the latter of these two causes is due to the former.

The fourth type of nosogenesis deals with the capacity to tolerate only certain *amounts of libido*, if these are exceeded the patient falls ill because his ego cannot cope with the task of repression.

With this outline in mind, let us approach the question, what makes the melancholic fall ill? In some cases the attack begins after a real loss, in others no such external cause can be found, and presumably an illness of an organic nature predisposes to the melancholia only because it weakens the ego's capacity to tolerate a certain *amount* of libidinal tension.

Let us turn to the events of childhood, in particular the peculiar melancholic Oedipus situation. Like all children, these patients in this stage of development desire as an expression of the love of their parents to have a child from or by them. All children are of course frustrated in this, but the melancholics-to-be treat this as a *narcissistic* blow, as a castration, and being weak in their genital organization regress to earlier levels. If they had more capacity for object-relationship they would be able to divert their libido to other objects, but theirs is a narcissistic character and they cannot do this. *What object-capacity they do possess also takes a regressive turn* and they strive to keep the object by the means which their fixation ordains, viz. by *oral*

¹ Freud, "Types of Neurotic Nosogenesis," *C.P.* II, pp. 113-121.

² This is to be distinguished from a stationary infantilism by the fact that there appears to be an effort to overcome the infantile fixations.

incorporation. This serves a twofold purpose, it preserves the object from the effects of overt sadism (since it is within the self, psychologically speaking) and at the same time it combines the little object-capacity that does remain with a narcissistic gratification, for the self has now grown greater by the incorporation and the object is there. The Super-Ego knows well the sadistic nature of the manoeuvre and brings punishment down on the ego for the act—food is made loathsome, the organs of digestion are perverted, the world (which the melancholic retains by an oral bond only) is turned to filth and excrement, all flesh is human flesh, all soil is rotting corpses and ‘even vegetables are made of human flesh,’ as my patient said. The melancholic self-reproach is now somewhat clearer, it is directed against the self because of the cannibalistic impulse which disturbed the child at, and prior to, and after the Oedipus stage.

Viewed in this way, the most striking symptoms of the disease are efforts at self-cure. By the violence of the self-punishments the ego hopes to be rid of the sense of guilt, by the oral incorporation of the object (the cannibalism) that object is in fact preserved from external violence, by the regression the genital integrity of the mother is preserved, and by the fantastic strictness of the Super-Ego the patient deflects his hostility away from his father. The disease symptoms show that they are even biologically adaptive!

What then causes melancholia? We can now give a fairly complete aetiological formula (i) Constitutional increase of oral erotism. (ii) Special fixation of libido at the oral stage of libido organization. (iii) Severe injury to the child's narcissism (weaning is often traumatic—psychically—in these cases) so that they suffer from a sense of desertion. (iv) Imperfect attainment of the phallic stage of libido organization with a distortion of the Oedipus situation, disappointment at this stage causing a regression to the oral sadistic stage, hence a permanent association of love-relationships and destructive-oral impulses. These factors lie dormant until in later life there comes (v) A frustration in object-relationships (in so far as these have formed) or wound to narcissism, or anything which by weakening the ego incapacitates it in its permanent task of repression. Between attacks melancholics do not attain full object-love; though the tendency to incorporate the object and destroy it is in abeyance, ambivalence and a measure of hostility remains.

(g) *The end of the melancholic attack* is for our inquiries as interesting as its initiation. It is thought (Abraham) that the melancholic can give up the oral-introjection when the violence of the sadistic phase ends, when, that is to say, the object is no longer endangered by the patient's hostility.

It is a curious notion that the illness is a device—among other things—for protecting *another* person from harm, and particularly curious in such narcissistic subjects as fall ill of melancholia, but we must remember that the phase of oral introjection serves also a primitive erotic impulse as well and that the object is preserved for egoistic reasons and not for ‘pure love.’

This picture of melancholia shows it to be a cycle of changes, no pretence is made that every phase is clearly understood or firmly established¹ but the psycho-analytical theories at least open up avenues of research which seem profitable to examine.

¹ For instance, changes in the ego last for such strangely variable times, without our being able at present exactly to determine some of the factors which cause the duration.

§ 10. *Super-Ego (Ego-Ideal)*¹.

- (a) *Introductory.*
- (b) *What the Super-Ego is not.*
- (c) *Stages in its development.*
- (d) *The Decline of the Super-Ego and Return of the Ego.*
- (e) *Disorders of the Super-Ego.*

(a) *Introductory.* There has been an inevitable overlapping of detail in the preceding paragraphs, so that readers will have begun to form some impression of the group of mental functions subsumed under this title.

The Super-Ego as well as everything else in psycho-analysis has its own course of development which is bound up with that of the libido, the acquirement of object relationships and ego development. Super-Ego activity is a technique for maintaining object relationships while at the same time affording an outlet for instinctual energies that often tend to destroy these relationships. Its function is adaptive, it is slowly acquired, integrated with other psychical functions and liable to disorders.

(b) *What the Super-Ego is not.* It will prove a saving of time to say at the beginning what the Super-Ego (Ego-Ideal) is *not*, and to clear away some mistaken notions frequently met with.

First, it is sometimes regarded as being a final criterion in conduct acting after the manner of a divine voice speaking within the mind; this is derived from theological beliefs and clearly shows the working of an infantile narcissism which projects omnipotence on to the Father (God) and later endows the introjected parental injunctions with the omnipotence of childhood again.

The *second* error is to assume that the Super-Ego is derived from Society at large, that it is a manifestation of an ill-defined 'herd instinct' and as such takes rank in regard to power, though not antiquity, with the instincts of hunger and love. This contains a grain of truth in a bushel of chaff. It does appear that the capacity to introject parental images is variable in different people and it may well be that there are familial and racial differences in respect to ability to form the working arrangements included under the term Super-Ego, but this is not the same as saying that its function is analogous to one of the primitive instincts. As for its derivation from Society at large, the matter is really the other way about; the opinions of Society are derived from processes of identification which are also operative in forming the individual's Super-Ego.

The *third* mistake is to assume that it is qualitatively identical in everyone and only quantitatively different. This is probably a disguised form of the theological error mentioned above, which tacitly assumes an absolute standard but allows for differences of perception due to mortal weakness.

The *fourth* assumes that it is synonymous with conscious aims and visions of the self as one ought to be. The worst form of this error is to identify the Super-Ego with systems of law; it assumes that the law is a product of the father alone² and that conscience is identified with conscious repressive

¹ The reader is particularly referred to Dr Ernest Jones' "The Origin and Structure of the Super-Ego" (Bibl. 293) and to Dr Sylvia M. Payne's "Observations on the Formation and Function of the Super-Ego (conscience) in Normal and Abnormal Pathological States" (appearing in this issue of this *Journal*) and to Bibl. 1, 3, 4, 109, 115, 170, 178, 182, 190, 192, 204, 216, 224, 249, 295, 339 a, 348, 395, 402.

² See present writer's review (*International Journal of Psycho-Analysis*, 1925, vi, p. 92) of Goitein's *Primitive Ordeal and Modern Law*, in which legal theories are discussed in terms of the Oedipus Complex.

processes. The old term Ego-Ideal may be partly responsible for this confusion. I should like to reserve the term Ego-Ideal for these conscious views of what the self ought to be and Super-Ego for the unconscious processes that give rise to them and give them strength. *The Super-Ego is an unconscious mental function*, the effects of its action may be at times conscious.

The *fifth* point is related to the last: it is assumed that the Super-Ego or conscience begins to operate when the child becomes conscious of moral sanctions: the matter is otherwise, it begins to operate before the child has established full object relationships—certainly before the beginning of the third year.

(c) *Stages in its development.* With this much said by way of clearing the ground of misconceptions, we can now discuss the development of the Super-Ego as it appears to the psycho-analysts, but some departure from chronological order must be permitted once more. The psycho-analyst operates a limited number of mechanisms which he finds adequate when properly combined to produce formulations for the different diseases and mental attributes with which he has to deal.

Those relating to the Super-Ego are: (i) the Fechner-Freud pleasure-principle (being the fundamental principle of psychical activity), (ii) the development of the libido, (iii) the development of reactive impulses in the ego, (iv) the element of deprivation through external causes (parents), (v) changes in object relationships, (vi) the mechanism of identification. I am aware that these mechanisms are themselves complicated and that some of them can and perhaps some day all of them will be reduced to fewer and simpler components.

One function of the Ego is to act as an intermediary between the instinct impulses, which are internal, and stimuli from the outer world. It follows that if there is a change in the character or the distribution of the instincts there will be a change in the behaviour of the Ego (assuming for the moment that there is no change in the outer world); we shall therefore be justified from our knowledge of the changes from pre-phallic to phallic and from phallic to genital stages in the libido to expect modifications in the Ego in the course of its development. Another function of the Ego is to keep the amount of excitement in the psychical apparatus as low and as constant as possible; it is the regulator of discharge, and is influenced as was said above by internal and external events. The Super-Ego is a *part* of this regulating mechanism which slowly develops in early childhood as a specially functioning part of the Ego-System to act as an Indicator when a certain kind of internal tension increases above a certain limit. It issues a warning signal to the Ego, so to speak, that there is danger to the Ego from the instincts, but the Super-Ego does not itself take part in the act of control (repression) which is a function of the Ego. It is not an instinct, it has no 'psychical energy' of its own at its disposal, but it makes use of such energy as it has acquired from the ego in the course of development. Finally it belongs to the systems in the mind that do not operate in the conscious levels. These metapsychological generalizations may be of service as an introduction to the study of the development of the Super-Ego in that they indicate a mechanistic attitude of the psycho-analysts rather than a mystical or anagogic one to the phenomena which are called by lay persons 'conscience.'

Three stages may be distinguished in Super-Ego development: pre-phallic, phallic and post-phallic. They are not sharply defined, and, following as they

do libido development, are open to the objections that changes of object relationship are at least as important as libidinal aims, and that this classification gives no prominent place to the reactive impulses of the ego.

I. *Pre-phallic Stage of Super-Ego Development.* In this stage the sphincter activities are endowed with large amounts of erotic excitement which are prized by the child and lead him under the influence of reactive ego impulses to rivalry with his parents (to eat as much as they do, to make flatus like them, to defaecate at his own time and not at theirs, to urinate strongly or at 'inappropriate' times, etc.). This pleasure in 'zone' or sphincter play is deprecated by parents and they show their disapproval by display of superior strength, physical and mental, so that the child can enjoy its own sphincter pleasures only at the cost of actual chastisement (physical) or at the cost of isolation from the parents (mental); in both cases the child is reduced to a condition of helplessness in the presence of parental strength. The alternative course is to adopt the parental injunction and renounce the sphincter pleasure; this can only come about by a process of identification with the parents. But why does the ego change its mode of regulating discharge? It does so from dire necessity: the ego is in contact with outer reality and is capable of recognizing danger, it is the organ which operates with memory-images and can recollect past discomforts (which the unconscious mind being opportunist does not, the ego on the other hand can take a longer view); when faced with superior strength and the danger of being left by the parents (*i.e.* scolded, cut off from the warm response of their love) the ego submits to the deprivation of immediate gratification, and furthermore to a sort of pre-castration, *i.e.* it allows a *part* of the self to be removed (faeces, urine), or a pleasurable libidinal activity to be ignored (gorging with food, playing with the jet of urine, erection even) without complaint because it can compensate the loss of a part with the gain by introjection of another part-object, *viz.* the parental interest in the activity in question¹. The danger is not a direct threat to the ego as a whole but to the part or to the activity which offends the parents, it is a non-genital danger, it therefore evokes 'pre-castration' reactions. Object relations in the early part of this stage are a blend of narcissistic and autoerotic, in the later period of the same stage are part-object relationships. The greater the cathexis of the zone in question, the more it has absorbed erotogenicity from other zones and become a centre of ego-identifications, the more will parental interference with the gratification at that zone approximate to castration². At the same time as this development in libidinal aim there is a change in object-relationship.

We can sum up this stage of Ego or more correctly of pre-Super-Ego development by giving a number of technical terms more or less endowed with exact meaning: it is a *pre-conscience* stage operating at a *pre-Oedipus* phase of *object-* and at a *pre-phallic libidinal*-phase of development, it is set in motion by the danger of *helplessness* in the face of superior parental strength (which danger does not however involve the unified ego-identifications = genital), the sacrifice to be faced is *loss of a part of the self* in return for continued

¹ The parent is not a unified figure but a conglomeration of presentations having less cohesion into a unified presentation than intense discrete presentations concerned with relatively isolated activities.

² Castration is an injury to ego and libidinal interests simultaneously, indeed that may be taken as its definition for the purposes of psycho-analysis. A 'castration-period' may be defined as a stage of development in which there is concentration of libido on, accompanied by considerable ego-identification with, a particular zone.

parental part-gratification, the whole process is under the dominion of the *pleasure-pain principle*. The *reactive ego-impulses* are simple reflex responses of hatred at being interfered with.

II. *The Phallic Stage of Super-Ego Development* emerges from the pre-phallic. As a result of the concentration of erotogenic excitability in the genitals and increase of ego-identification with them the libidinal and ego impulses undergo a change which introduces for the first time a sexual conflict in the narrower or popular meaning of the term; that is to say, the stimulation of a part of the body (genitals) now evokes a loving attitude to one parent and a hostile attitude to the other. The Oedipus Complex is in full force at the beginning of this stage, indeed the Super-Ego may be defined as the mechanism for solving the conflict set up by Oedipus wishes (to kill the father and lie with the mother in the case of the normal male).

In the previous stage the boy's attitude to his father has been an admixture of love and hate which have flowed together to form the anal-sadistic organization, *i.e.* the love bond is maintained because hate has acquired an erotic character. The Oedipus stage inherits, so to speak, an already established fusion of ego and libidinal impulses toward each parent; we are now concerned with the utilization of the legacy. In the Oedipus stage the boy experiences erotic genital desire for his mother; this cannot come to expression because of the interference of the father, he cannot put up a fight owing to three factors, (1) his affectionate feelings for his father, (2) physical weakness, (3) fear that any expression of erotic desire for his mother would endanger his genitals (castration fear affecting ego and libido). The conflict has to be solved in such a way that the ego may undergo as little danger as possible and yet afford the libido as much gratification as possible. The way out of the difficulty involves alterations in object relationship to father and mother and in libido organization; these must be considered in turn.

The love for the mother forces the boy to a hostile attitude to his father, but this person was already loved, or rather was regarded ambivalently. If the hatred is strong the unmodified love relation to the father is dissolved, part of the erotic impulse regresses to the anal-sadistic stage and turns to sadism, another part is preserved on the direct alloerotic genital level but is inhibited in its aim, it maintains the attitude of affection which children have for their parents. The boy does not work out the sadism directly upon the father for reasons of fear, he 'short circuits' his antagonism by a mechanism which has been discussed already under 'Narcissism.' He sets up the father-*imago* within himself, object-love giving place to identification, and thus provides within his own ego-system a replica of the conflicting elements in his life; by this introjection some object-libido is passed over to the ego (a narcissistic advantage) so that the ego now can operate a larger amount of libido than formerly, part of it is robbed of its sexual aim, *i.e.* it is de-sexualized or sublimated, part, as has been said already, is turned to sadism. By the process of identification the character of the ego is changed (it is thought that this change utilizes some of the ego-libido above mentioned) so that the ego has now some of the attributes of the introjected person. He was not silent before and is not now. He issued injunctions and claimed prerogatives so that his *imago* after introjection treats the ego as he did. The hostility to the father becomes through the introjection now directed to the ego which is plied with imperative orders, the fusion of erotic feeling and hostility affords an outlet for libido gratification in sadism—only the victim is the self. Other

libidinal component impulses act through the super-ego in the same way, so that the ego is forced to be orderly, dutiful, is watched and punished.

The relation to the mother suffers only one change, viz. the renunciation of the genital aim; this is not the same as complete deflection of the libido because some gratification is possible through 'aim-inhibited' relationships, so far as the genital-aim is concerned there is liberty given but it must be exogamous.

This may be called, in contradistinction to the earlier stage, a *Conscience Stage* of development because the ego (under duress, to be sure) has acquired an internal mentor telling it not only what it is not allowed to do but also what it must do (wherein this stage differs from the former). It comes into prominence at the *phallic stage* of libido- and at the *Oedipus stage* of object-development because only here is the conflict between the sexes unavoidable, it is set in motion as formerly by the helplessness of the ego in face of the next greatest *danger* to death itself, viz. castration, neglect of the danger involves a *loss* not of a part of the self but of the unified ego- and libidinal-impulses, and isolation from parental love. Here again the ego shows its subjection to the *pleasure principle* and the *reactive-impulses* of hate and fear are seen clearly at every stage of the development.

III. *The Post-Phallic Stage of Super-Ego development.* The 'stages' are artificial and should not be classed with the pre-genital and genital stages of libido development, for the latter relate to distributions of libido and are easily demonstrable, whereas these super-ego 'stages' describe types of response to complicated internal and external stimuli. It would have been possible to call the first the 'pre-castration,' the second the 'castration' and this, the third, the 'loss of love' stage, which nomenclature would follow the consequences in the erotic life resulting from disregard of the super-ego's interference. Another alternative classification would have called the first the stage of 'helplessness,' the second the 'danger,' the third the 'boycott' stages, directing attention to the type of danger experienced by the ego. On taking another aspect of the individual's development, namely, the relation to the parents, it would be possible to talk of pre-Oedipus, Oedipus, and post-Oedipus stages. Perhaps the reason why these terms have not been employed in the psycho-analytical literature is that they are if not inaccurate at least likely to be misleading, and this not merely because sharp dividing lines cannot be drawn but because in so many cases where there is fixation at say the anal level the child not only plays out a great deal of its Oedipus complex in terms of anal rather than genital relationships, but also finds strong ego-identifications with the anal zone and the anal products and so may be said by all but purists to suffer from a castration complex at that stage.

In the paragraphs on the Oedipus-phallic-castration-danger-stage (call it what you will) stress was laid on the rivalry between father and son for the mother in which the original hostility between son and father was replaced by a friendly object-love which in turn was replaced by identification. This manipulation of cathexes produces the profoundest change in the individual, or more correctly, ushers in the change, for from this moment the child is a social being. From now on he deals with his fellows on the pattern of his mastering the Oedipus complex. With the inhibition of the aim of the sexual impulse towards the mother there occurs an inevitable increase in libido accumulation requiring outlet; the new direction of libido outlet is thus forced on the child from internal and external causes and the ground is prepared

for aim-inhibited gratification. This change is accompanied by a corresponding increase in the capacity to form the identifications following friendly object relations with potential rivals, viz. other persons of the same sex. It was not only through fear of the father that the ego took on his attributes by instituting the super-ego but also through love of him, so in this later or post-Oedipus stage it is not only fear of public opinion but love for fellow beings which maintains the function of conscience. The fear of chastisement becomes the sense of guilt. Thus the two factors at work in bringing an individual into society and keeping him aware of its demands spring from the primal relationships to his parents, love for companions and compatriots being derived from the homosexual component of the libido and sensitiveness to social opinion being a derivative of the hostile impulses.

(d) *The Decline of the Super-Ego and Return of the Ego.* The formation of the Super-Ego begins in the nursery to meet the requirements of the nursery code; it changes from a sort of 'Sphincter Morality' to a 'Genital Morality' which latter is designed to prevent incest; furthermore the sphincter- and genital-moralities work unconsciously, for the most part. Viewed in this way it is not difficult to see that the super-ego or conscience is at these stages ill designed to meet the needs of adult life, for in its second stage the prohibition covers not only incest but all genital activity, and in general its mode of action by repression, inhibition and enforcing regression is archaic, and not like conscious reactions finely graduated to suit the circumstances (the stimuli) of the moment. The super-ego, under the influence of social opinion, gradually in the third stage loses its rigid character in respect to certain actions (for instance, genital prohibition relaxes in respect to exogamous unions) but is preserved more or less strongly in others (for instance 'habits' such as the passing of wind)¹. The mechanism of this relaxation was discussed in the third stage; it is substitution of other persons for the father, a series of introjections provided by everyday life. Hostility which originally led to identification with the father, later leads the individual to turn his libido away from the domestic circle to the outer world, there to find mother- and father-*imagines* and objects to which he can respond without mental strain and fear. The further the displacement from the parents the more is the ego likely to be stimulated without reference to father-hate and mother-desire. By experiencing exogamous sexual relationships the ego discovers that the sexual act is not accompanied by death, castration or boycott; the unconscious force of the super-ego is weakened at the expense of the conscious regulation of mental excitation and discharge which the ego exercises; while the regulation

¹ It is difficult—apart from the libido theory—to find a biologically adequate reason for such prohibitions or probably for those against incest for that matter; so far as we can observe them, animals are not shocked at actions which put nursemaids in consternation; yet we find the human adult for no obvious reason taking more notice of pre-genital activities than the sub-human groups. The explanation probably lies in the fact that culture rests on the unstable basis of partially modified impulses, if man took too much manifest erotic delight in these pre-genital activities he would lose interest in the refined evolutionary products of these activities; if he had no inclination to them at all, if his life was a simple rut and non-rut (the latter being only a filling of the belly till the next rut) he would not trouble to—could not trouble to—labour over these aim-inhibited activities. By the interference of the latency period man's sexual life is divided into a stage of relatively uninhibited sexual gratification, a stage of sublimation and the final stage of relatively uninhibited sexual gratification; the gratifications allowed by culture ease the work of repression of the pre-genital erotic needs, some repression is needed to safeguard the genital.

of the psychical apparatus is relegated to the archaic unconscious, the mechanism of conscious adaptation is, if not impossible, at any rate difficult¹.

The assumption of control by the ego does not mean unbridled licence and violence; unlike the super-ego it is in touch with reality and can adjust its mode of response to the external as well as to the internal stimulus. The adult's attitude to his fellow men is one of attention to their modes of response coloured with a kindly feeling, not blind subjection to codes of behaviour, which is the nursery way. The ego should supplant the super-ego as a regulator and leave it only the duty of signalling the unconscious infantile instinctual demands. This supplanting of the super-ego by no means always occurs; if it does not we may suspect disease of the function in question, which will now occupy our attention.

(e) *Disorders of the Super-Ego*. Where there is normally development there will be found in some individuals arrests in that development producing disorders of growth. We have found this to be the case in regard to the libido and the Sense of Omnipotence, and some day we may have a series of ego diseases to classify in the same way. The super-ego is no exception to this general rule; little is known of its intrinsic disorders, more is known of its anomalies due to concomitant disturbance of libido-cathexis and object-relationships.

We may start a consideration of the disorders of the super-ego with a re-examination of *melancholia*. Here we find that there is fixation at the anal-sadistic stage and that the individual tries to master the accumulated libidinal tension (which has a sadistic aim) by turning this upon himself; he acts not actively nor passively but reflexively. This theory is not intelligible without the inclusion of the super-ego, which is seen to be the introjection of the father-imago at the individual's sadistic stage of development. The self punishments are acts of hostility made harmless externally at the expense of the ego. The greater the hostility to the external object the greater the danger to the self.

In the *obsessional neurosis* the ego forms extensive reactive formations to evade the sense of guilt caused by the hostile impulses, e.g. washing ceremonials, penances, etc. The ego is not aware of the reason for these acts but responds to the promptings of the super-ego (which is unconscious) and so reacts as if it were guilty. These peculiar behaviours are ascribed to (i) precocious ego development, and (ii) to the formation of the super-ego at the anal-sadistic stage, i.e. the child works out its Oedipus complex at the anal-sadistic not at the phallic stage.

Confession is an attempt to ease the need for punishment (for impulses of which the subject is not aware) by replacing the inner condemning factor in the mind (conscience, super-ego) with an external person. It is a step to social life in the sense that there is a move away from dependence on the early parental injunction to a substitute in the current life of the subject, but the technique is bound to be unhelpful in the long run because (i) the confessor substitutes the father without at the same time detaching the

¹ The super-ego of woman appears to be more infantile in character than that of man. This may be explained in part by the character of persons she identifies herself with being more infantile (i.e. mothers hand on their infantile egos to their daughters as super-egos, thus perpetuating the sexual differences within the ego-system), and in part because the opportunity in the social and economic world for working off the super-ego in a succession of *imagines* of widely different type is more restricted than in the case of the male—at least this may have been so till the recent changes in the life of woman have made the sexual differences less marked.

patient from his early fixations, (ii) confession cannot penetrate to and deal with unconscious tendencies, and (iii) punishment is not the means to *alter* instinct impulses, seeing that it gratifies them. It is useless for a reformer to preach total abstinence after he has made his hearer drunk. In the same way punishment by gratifying the sadism re-enforces the pre-genital fixation, it does not lead the subject to a more adult synthesis of libidinal aims.

Self-criticism—a useful super-ego function that persists under the regime of the re-established ego—may be exaggerated, as in melancholia. This exaggeration is due as before mentioned to increase of sadism directed to the self combined with a scopophilic impulse carried over into the super-ego.

The criminal is a person who has a super-ego defective in the capacity for self-criticism. It appears that the super-ego is cut off in some way from access to the outer world, so that the working-over process is prevented. In addition there has been a defective development of the super-ego in the earliest stage, the component impulses acted in isolation or rather produced isolated reaction formations. Guilt if present is connected with symptoms not with conscious acts.

Bad up-bringing, i.e. cases where the parents' conduct obviously falls below the standard set up by the super-ego, exerts a traumatic effect on the parental identifications, impairing the ease with which the original hostile impulse is changed to affectionate object-choice and later identification. The end result of this state of affairs is that the child cannot enter the third stage, i.e. transfer to society the parental complex and satisfactorily work it through.

The super-ego arises as a compromise between the desire to love and to be loved, it is maintained for a time as a mechanism for incorporating into the infantile ego a standard of conduct to which it will have to conform now and in the future (while the home influence is important to it), it provides an outlet for aggressive libidinal impulses without disturbing external relationships, and finally by duress it urges the ego to change its character and assume control of instinct impulse not according to its (the ego's) standards but those of the outer world. When it breaks up, the anal-sadistic element of it is changed into an impulse to mastery of external objects, which is taken over by the ego, and a vigilant element (derived from a blend of sadism and scopophilia) which now acts as an agent of the ego in co-ordinating internal and external impulses.

§ 11. *Death Instincts.*

Some years ago Freud gave rein to his speculative inclinations regarding the nature of instinct and evolved a theory which will be given in brief in this paragraph. He said of it himself that he does not know how much credence to give these theories which differ from the other psycho-analytical theories he has put forward in being speculations rather than close or relatively close deductions from observation¹.

Analysis of cases of traumatic neurosis showed that the symptoms were due not only to a libidinal wish—to a desire for erotic gratification, however distorted in expression in the symptoms—but to a compulsion to repeat in the mental life of phantasy, dream and symptom the original situation of trauma and master the great amount of psychical excitation which it evoked by a mental means. The repetition gave an opportunity to take the trauma

¹ Vide *Beyond the Pleasure Principle*.

in 'divided doses' and so deal with it more easily than would be possible if the shock had to be mastered at a stroke¹. From these observations, from a similar tendency to repetition in the phenomena of transference in the analysis of neurotics and from the play of young children Freud surmised that "*an instinct would be a tendency innate in living organic matter impelling it towards the re-instatement of an earlier condition,*" i.e. a manifestation of inertia in organic life. But this, as he hastens to point out, does not explain certain features of the sexual instincts which appear to follow a different path in that they seem ever to strive to create new individuals. This may be more apparent than real: with the division of gonads and soma the body may be divided into organs which strive to create earlier conditions of living protoplasm—unicellular germ cells—and those which serve no such direct tendency; the former are the physical source of the life-instincts, the latter of the death-instincts, the interplay of these two accounting for the almost infinite variety of physical and psychical manifestation of organic life. "The one group of instincts presses forward to reach the final goal of life as quickly as possible, the other flies back at a certain point on the way only to traverse the same stretch once more from a given spot and thus to prolong the duration of the journey. Although sexuality and the distinction of the sexes certainly did not exist at the dawn of life, nevertheless it remains possible that the instincts which are later described as sexual were active from the very beginning and took up the part of opposition to the rôle of the 'ego-instincts' then, and not only at some later time."

Every cell is on this hypothesis assumed to possess these two instincts; when the organism becomes multicellular the sexual impulses of the somatic cells take the other cells as 'objects' but the gonad cells remain 'narcissistic.' This division into a sexual and non-sexual function allows the concentration of sexual energies in the sexual cells to go forward unchecked (and thus the sexual cathexis is conserved for their enormous constructive activity) while the non-sexual cells utilize their sexual energies in 'neutralizing' their own and each other's death-instincts. This ingenious hypothesis has one application at least in psychiatry, viz. in suicide. Normally the death-instinct is turned outwards to the world and either combines with the sexual to form sadistic impulses or acts in isolation as the impulse of aggression. When turned outwards death-instincts are innocuous to their possessor, they only injure the external object; if, however, the object is introjected, this instinct is no longer innocuous to the possessor and the danger to the self may be so great that self-destruction results. Whether readers will share Freud's own 'tepid feeling of indulgence' to these views or will reject them is no great matter, since psycho-analytical psychiatry can get on very well without them at present.

¹ This explains the phenomenon of 'battle-dreams' being repeated long after the outer danger is over. The course of battle-dreams is usually (a) 'pure' battle-dream with intense anxiety, (b) mixed battle- and 'civilian'-dreams (i.e. dreams of civil life) with a decreasing amount of anxiety, (c) a stage in which the war element is absent on most occasions but is revived whenever the patient is in a state of emotional excitement which may have no direct connection with the war.—It looks as if the excitations due to extreme physical danger could be more easily mastered if they were mixed with libidinal excitations, and that the 'mixed battle-dream' was indicative of an economic (psychical) process at work in effecting a cure, or at least some relief.

Postscript to Part II.

The reader is reminded that this part of the Survey only covers about a decade and does not bring the theories up to date. It opens with the concept of Narcissism which effected a revolution in thought; looking back at the literature before this (1893-1914) one cannot help reflecting on the relative poverty of the analytical instruments then employed for dealing with the problems of the psychoses. At the conclusion of the Survey of the third period a like reflection (1923-1926) in regard to the second will arise. The subdivision of the psychical apparatus into three parts, Ego, Super-Ego and Id, and the new views on Anxiety, transform the picture once more; here again the greater part of the work is done by Freud.

[The Bibliography will be printed at the end of Part III.]

REVIEWS

Psychologies of 1925. Powell Lectures in Psychological Theory. By MADISON BENTLEY, KNIGHT DUNLAP, WALTER S. HUNTER, KURT KOFFKA, WOLFGANG KÖHLER, WILLIAM MCDUGALL, MORTON PRINCE, JOHN B. WATSON, ROBERT S. WOODWORTH. Clark University, Worcester, Massachusetts. 1926.

We have in this volume a series of lectures which purport to set out the psychological principles that were up-to-date through the year 1925. Six different schools of thought are represented, but the psycho-analytical school finds no place here, although its doctrines and its methods are regarded by many competent persons as the most important development of psychology in recent years.

The first four chapters are devoted to 'Behaviourism'—three by John Watson and one by Walter S. Hunter. We are grateful to Hunter for the term 'Anthroponomy' which he uses for the science of human behaviour and contrasts with psychology; for it is notorious that the thorough-going behaviourist has scrapped all the stock-in-trade of the psychologist, and it is hardly honest of him to call himself a psychologist or his science psychology. As Hunter says: "The aspect of man which the psychologist studies is that which is termed mental, or psychical, or experiential." But the behaviourist will have nothing to do with "the ancient philosophical concepts of mind and consciousness as aspects of the universe which differ from the physical."

Woodworth in his single contribution treats of "Dynamic Psychology." He says the aim of modern psychologists of all schools is the study of the "workings of the mind." Dynamic Psychology is concerned with "antecedents and consequences, cause and effect, stimulus and response, the combination of factors and similar dynamic relations." It is not limited to the study of feelings, emotions, conation and muscular and glandular action. Perception, Woodworth thinks, is especially in need of dynamic concepts. The unitary percept resulting from a plurality of stimuli, as in McDougall's dot figure, is not adequately accounted for by 'simultaneous association' nor by synthesis or apperception. The really dynamic concept to fit the case is the concept of stimulus and response. The dot figure is a stimulus to which more than one response is possible.

In dealing with the attitude of dynamic psychology to the purposive and mechanistic tendencies in psychology to-day, Woodworth makes some cogent remarks on the relations of causal and purposive interpretations of behaviour. He points out that there can be no contradiction between the purposiveness of a sequence of actions and its being a causal sequence. "A purpose is certainly a cause; if it had no effects, it would be without significance...every purpose has its cause in a double sense: it has its genesis in the life-history of the individual, and, at any time, it has its exciting stimulus. The whole story of purpose would be futile, if purpose were not the effect of definite causes, as well as the cause of definite effects" (pp. 118-119).

Three lectures are devoted to *Gestalt* psychology. Kurt Koffka gives an interesting and instructive account of "Mental Development" and Wolfgang Köhler describes some of his well-known experiments in a lecture on "The

Intelligence of Apes." In his second lecture, on "An Aspect of Gestalt Psychology" Köhler tells "how Gestalt Psychology treats some sides of our sensory experience, more especially, how the new ideas deal with the visual field in a state of rest."

The section of this volume that appeals most directly to medical psychologists is that which appears under the heading, "Purposive Groups"; for three of the five lectures included in it are by Morton Prince and the other two are by William McDougall. Morton Prince's three lectures are entitled: (1) Three Fundamental Errors of the Behaviourists and the reconciliation of the purposive and mechanistic concepts; (2) Awareness, consciousness, co-consciousness and animal intelligence, from the point of view of the data of abnormal psychology—a Biological Theory of Consciousness; (3) The problem of personality. How many selves have we?

In his first lecture Dr Prince spends much powder and shot in controverting the errors of the Behaviourists. Their first error is "the denial of consciousness as cause of bodily reactions." But if this be an error it is an error that is older than Behaviourism. Dr Prince's memory goes back to the days of Herbert Spencer and Huxley, Hughlings Jackson and Charles Mercier, and he has a healthy contempt for the 'steam whistle' interpretation of the part played by consciousness in conduct. He rather irreverently stigmatizes as 'steam whistlers' all who disbelieve in the causal efficacy of consciousness.

The second error of Behaviourists is to suppose that behaviour can be completely explained in terms of neural and other bodily processes alone. Their third error consists in confining themselves to only one method of observation and experimentation—the objective method.

One cannot help thinking that Dr Prince might have found more important errors in Behaviourism than those he has selected, and some of his invective seems like "kicking the dog that isn't there." It is hardly necessary to go into the researches of modern physics on the nature of matter, in order to invalidate materialism as a philosophical principle. But this is what Dr Prince is at some pains to do, and when he has reduced brain processes to units of negative and positive electricity, or units of energy, or both, he reminds us that these are only "phenomenal manifestations of an unknown something." His own reconciliation of the difficulties inherent in the problem of the mind-body relation is the same as that put forward by Strong in *Why the Mind has a Body*. The unknown immaterial reality, of which electrical units and units of energy (brain processes) are the phenomenal manifestation, is consciousness (mind). Dr Prince does not discuss the difficulties that arise out of this solution of the problem, and he is happy in that by adopting it he gets rid of the bogey of interactionism, can reconcile the purposive and mechanistic concepts, and, above all, can relegate "the epiphenomenalism of the steam-whistle to that limbo where such absurdities belong."

After so brave a defence of 'mentalism' as a basis for the discussion of human behaviour it is something of a shock to find that in order to account for the persisting traits of personality Dr Prince falls back upon *neural* dispositions. He says: "It is obvious that this quality of fixed persistence implies some kind of enduring dispositions and these we are compelled to formulate in physiological terms..." He here seems to imply that a neural disposition has some sort of reality, whereas a "mental disposition is a figure of speech." But this is just the contrary of his view that mind is the reality of which neural processes are the phenomenal manifestations.

In his lecture on awareness, consciousness and co-consciousness Dr Prince gives in more detail the biological theory of consciousness which he proposed to us at the International Congress of Psychology in 1923. He holds to his distinction between awareness and consciousness. By awareness he means awareness by a subject; by consciousness he means thought, sensation, perception, imagining, feeling, and so on, without any implication that there is any subject of such experiences.

The evidence on which he relies to justify his contention that conscious processes may occur without a subject of experience is drawn largely from psycho-pathology; and more especially from the phenomena of co-consciousness which he has done so much to elucidate. I have personally verified almost all the observations he describes—with one exception; but this exception concerns a matter so central to his argument that it requires consideration in some detail. Dr Prince says that a pin-prick in hysterical anaesthesia is remembered in hypnosis, but that the hypnotized hysteric declares that "when it occurred he was unaware of it." There is ambiguity in the use of 'he' in this account. For what the hypnotized person means may be that he, as 'waking self,' was unaware. The facts are more clearly put in another sentence: "These he now claims to remember were true co-conscious perceptions of which the hysteric was unaware in spite of concentration of attention"; that is, in my view, the hysteric as 'waking self' was unaware.

In the following quotation Dr Prince states succinctly his interpretation of all co-conscious experiences of this kind. He says: "The introspective testimony of my dissociated subjects, who in that condition recalled vividly and precisely these subconscious experiences, has been unanimous that these experiences were without self-consciousness, that in their content there was nothing that the personal pronoun 'I' could be applied to. The subject could not say, and there was nothing that could say, 'I saw this,' 'I felt that'; the perceptions, feelings, etc., were not synthesized into a self or personality. The conscious events were just sensations, perceptions, images and thoughts and nothing more—no agent, nothing that could be called a *psychological* 'experencer'" (p. 237).

My own observations and experiments seem to me to be entirely opposed to Dr Prince's view. All my hypnotic subjects used the first personal pronoun in describing their co-conscious experiences. They would say, "I remember now, you pricked me three times, but when I was awake I did not feel anything"; that is, "I," as 'waking self' did not feel anything. Or if an incipient doubling of the self had arisen or had been artificially produced, the secondary personality would say, "I felt it when you pricked her, but *she* did not feel anything."

The difference between Dr Prince's findings and mine would seem to afford another example of the way the views of the observer may affect the results of hypnotic experiments. Dr Prince was looking for instances of 'subjectless experience,' whereas I have never doubted that experience always implies a subject whose experience it is.

Dr McDougall devotes two lectures to a defence of the proposition that man's acting and thinking are purposive. The need for such a demonstration of the obvious has been brought about by the alarming popularity of mechanistic behaviourism in America. It is unnecessary to review Dr McDougall's arguments in contravention of any mechanistic psychology, for they are well known from his other writings. He deals separately in these lectures with

the three rival groups into which the Behaviourist school has split. The followers of Watson he calls strict behaviourists. They refuse to recognize both conscious activity and the goal-seeking nature of all behaviour. A smaller group, headed by Tolman, although refusing to be interested in conscious activity, do admit that behaviour is a goal-seeking process, and their teaching is a sort of purposive behaviourism. As Tolman says, "it is not a mere Muscle Twitchism of the Watsonian variety." A third group, represented by Allport, do not deny the facts of conscious activity, but they make no use of introspectively observed facts and they accept 'muscle twitchism.' Dr McDougall vindicates purposive psychology by showing the inadequacies of these three types of Behaviourism.

Knight Dunlap writes on "Reaction Psychology." This, in his view, is the only psychology that can be called scientific. He relegates to the dust heap the whole Anglo-German tradition of introspectional psychology and tries to make the reader's flesh creep by depicting the awful consequences of subjection to Malebranchian metaphysics. By limiting his vision to "the view of the organism as a response mechanism and the assimilation of conscious responses to other responses," by insistence on the importance of 'integration' and 'patterns,' by restricting introspection to "the awareness of things inside the body," by getting rid of the instincts, by regarding 'images' as myths, and by the rejection of various concepts that have been entertained by many competent persons, Dunlap thinks "there can be no reasonable doubt that we have come to a permanent basis for psychology." In a world where so much is doubtful it is odd to meet so much assurance.

In striking contrast to the omniscience and intolerance of Knight Dunlap is the suave and courteous exposition by Madison Bentley of "The Psychologies called Structural." His exposition is lucid and concise, and he shows very clearly the important contributions to our knowledge which have resulted from the work of the structuralists. He also points out, however, the defects and the limitations of structuralism, but he qualifies his adverse criticisms by certain reflections which might with advantage be taken to heart by some of the other contributors to this volume. He says: "There is no doubt, moreover, that the criticisms should be tempered by reflection upon the complementary frailties and limitations of competing standpoints. If this creed does ultimately rest upon a certain kind of 'temperament,' as we have heard that it does, and upon a preference for problems of a certain restricted type, as we have seen that it does, then its claim to supply the one substantial foundation for our subject or to represent a 'purer' and more desirable set of scientific principles than others would seem to stand with no more justification than do the similar pretensions of rival doctrines" (p. 404).

T. W. M.

An Introduction to Forensic Psychiatry in the Criminal Courts. By W. NORWOOD EAST, M.D. London: J. and A. Churchill. 1927. pp. x + 382. Price 16s. net.

The points of legal importance which may arise as to the mental state of a person accused of crime have been discussed in many books. But there has, hitherto, been no text-book dealing exclusively with the subject. This want has now been supplied by Dr Norwood East, from the store-house of his long experience.

In the first place, the ascertainment of an accused person's mentality involves his due examination. The primary chapter deals most admirably with this process. It is pointed out that, to be satisfactory, the examination must be thorough, and that there are, consequently, decided advantages in having the accused under remand, in a prison hospital. These advantages supply one strong argument against the oft-made proposals to allow bail more freely in criminal cases. Not only do opportunities for adequate observation occur when the accused is in an institution, but it is pointed out that adequate examination can only be made when the examiner is in the mood to perform it. Only those who have experience in this matter can fully appreciate the truth of this statement. The estimation of intelligence may be of much moment, and for this purpose some 'tests' are necessary. In addition to the well-known 'Terman scale,' various useful 'performance' tests are mentioned. It is a little surprising to find that Healy's pictorial completion test is not included among these. The very necessary caution is given that these tests measure intelligence only, and do not estimate other more important mental factors. The weight which should be given to a family history of insanity is indicated. The symptom of professed amnesia for the crime is considered, and it is pointed out that emotional tension may occasion a genuine dissociation with true amnesia. Note is made of the fact that sane and insane delusions may coexist in the same case.

The next chapter deals with legal procedure and practice. The inexperienced medical witness could not have any clearer guide. The correct mode of giving evidence is expounded, and some common pitfalls are indicated. The distinction, often unappreciated even by superintendents of mental hospitals, between the two verdicts of 'insane on arraignment' and 'guilty but insane,' is plainly exhibited. A man may be insane at the time of his trial, may rightly be found to be 'guilty but insane,' and yet may be fit to plead. The existing criteria of 'criminal irresponsibility' are described, and a brief history of the development of this conception is provided. Dr East considers that hardship to the accused does not, in practice, arise from the *McNaughten dicta*, because in suitable cases the law is not strictly applied. He thinks it possible that alteration in the law might result in its less elastic administration. We agree that the time has not yet come for an official revision of the present criteria.

The next two chapters deal with the criminal bearings of mental deficiency. The extreme estimates made by certain American, and other authorities, of the percentage of mental defectives to be found amongst criminals, are rightly rejected. The importance of making psychological investigation before sentence is indicated. With respect to 'mental age,' Dr East says "the upper limit of the delinquent feeble-minded person may be placed at ten to eleven years, as a rule, and the nearer to the ten year limit the less disputable the diagnosis. If twelve years was generally accepted as the upper mental age of the moron, very many persons in this country would be included as defectives for no sociological reason." The difficulty of diagnosis which may occur in cases of exaggerated adolescent instability is pointed out. As regards the controversial topic of 'moral imbecility,' Dr East believes it to be of high importance to distinguish between 'intelligence' and 'wisdom.'

The various types of psychosis, in their connection with crime, are then taken up, in order. Valuable hints are given, and some very interesting observations are made. We learn that in a recent series of sixty-six cases of

paranoid crime no one of the prisoners was charged with a sex offence. This is curious, having regard to the common feature of sexual delusions in these psychotics. The frequent absence of grandiose delusions in dementia paralytica is noted. The frequency of 'alcoholic' crime makes the chapter on alcoholic insanity of special interest. The large amount of petty crime which is due to alcoholic dementia is noted, and comment is made on the unfortunate fact that the majority of those who suffer from this condition cannot be certified as insane. It may be that an alteration in the law is more needed in this direction than in any other. The difficulties which may arise in the differential diagnosis of alcoholic pseudo-paresis and dementia paralytica are indicated. The very important bearings of epilepsy are adequately dealt with. All these chapters are illustrated by well selected cases which have occurred in actual practice.

The subject of psychasthenia is only dealt with briefly, no doubt for the reason that, as Dr East says, it does not convey immunity from responsibility, in the present state of the law. It is probable that a cautious attitude is justified on this, as on certain closely allied topics, in view of the unsettled state of psychological knowledge. Statements made by psychologists are often misunderstood, and are sometimes wilfully misrepresented. There is a real danger that criminology may be retarded rather than advanced. It is our duty to go on working, until such time as we have accumulated a sufficient body of observations.

Finally, we have a short, but most useful chapter on feigned insanity. Very excellent rules are given for the detection of the malingerer. Dr East considers that there is little evidence to support the view that attempt at deception usually results from some mental abnormality.

The worker who is confronted with a problem in forensic criminal psychiatry will, as we have said, find invaluable assistance in this volume. But the book may induce the student to go further. For the question of 'responsibility' is of surpassing interest, and can be fully appreciated only by those who will take the trouble to follow it into the fundamental metaphysical fields.

M. HAMBLIN SMITH.

Crime and Custom in Savage Society. By BRONISLAW MALINOWSKI. Kegan Paul, Trench, Trübner and Co. 1926. pp. xii + 132. Price 5s. net.

Malinowski's book is mainly a vigorous protest against all attempts to represent the 'savage' as a sort of weird animal actuated by motives unknown to, and hardly comprehensible by, civilized man.

"A fuller knowledge of the so-called savages has revealed 'Ye beastly devices of Ye heathen' as the product of firm law and of strict tradition, due to biological, mental and social needs of human nature, rather than as the outcome of unbridled passion and unfettered excess" (p. 2).

On the other hand the author shows that anthropology has been rather overdoing this point. It cannot be said that the mechanism which enforces obedience to law in a primitive society is merely an inner mechanism, a 'mysterious propensity' of the savage to obey law; all we can safely assert is that the mechanisms used for these purposes are not the same as those found in civilized society. In examining the system of Melanesian economics he protests against the use of the word 'communism' (Rivers) in connection with their peculiar system of canoe property. He tells us that "a modern

joint-stock company might just as well be called a communistic enterprise" (p. 19), but only to assure us that it cannot be compared to a joint-stock company either. In fact he protests against all sorts of scientific catch-words and would limit the function of the ethnologist to an accurate representation of the concrete facts. Reciprocity is the binding force in economic and all other obligations: in fact the dual organization, the division of the community into two exogamous halves, is also an outcome of this principle of symmetry. The ceremonial aspect of transactions gives them additional force.

"The gifts of food in the system of exchange described above must be offered according to strict formalities in specially made measures of wood, carried and presented in a prescribed manner, in a ceremonial procession and with a blast of conch-shells. Now nothing has a greater sway over the Melanesian's mind than ambition and vanity associated with a display of food and wealth. In the giving of gifts in the distribution of their surplus, they feel a manifestation of power and an enhancement of personality. The Trobriander keeps his food in houses better made and more highly ornamented than his dwelling huts" (p. 29). These are the forces at work to maintain law and order, but egoism is always trying to get the better of the other man and shirk all kinds of duties and obligations. Mourning partakes of the nature of a legal obligation to the dead and his family. A brother is under the obligation to provide for his sister, even after her marriage; indeed the main heap in each garden plot is always for the sister's household. Every relation within the clan is regulated by law, but not as Dr Rivers and others suppose on the principle of primitive communism, for the rule that pervades the whole social structure is that of "give and take." "The savage is neither an extreme collectivist nor an intransigent individualist—he is like man in general a mixture of both" (p. 56). Legal institutions in a savage community are not embodied in an independent system; they are just a specific aspect of the social organization. It is rather surprising to learn that, according to the author, no man, however primitive, will instinctively act against his instincts or unwittingly obey a rule if he feels inclined to defy it. "The fundamental function of law is to curb certain natural propensities, hem in and control human instincts and to impose a non-spontaneous, compulsory behaviour" (p. 64). In the second part of the book, "Primitive Crime and its Punishment," the author relates what actually took place in a case where the rules of exogamy were broken. It was a marriage between a man and the daughter of his mother's sister ('ortho-cousin' according to anthropological terminology). According to the native point of view this is incest, since the daughter of the mother's sister belongs to the same moiety of the tribe. But nothing happened until the girl's discarded lover charged his rival of incest, publicly "hurling at him certain expressions intolerable to a native" (p. 78). Then he committed suicide, accusing his rival of having caused his death, and in the fight that broke out between the two clans the other man was wounded. Malinowski stresses the point that obedience of the law was not absolute and that even public opinion did not react till it was confronted with a public statement of the crime by an interested party. Moreover as there are certain beliefs about supernatural visitations that inevitably follow clan incest the author was surprised to find that this alone was not sufficient to keep the culprits from committing the crime. He was then told that the natives possess a well-recognized system of magic the aim of which is to counteract the pathological results of clan incest. We learn from the author that there is a great difference to the native mind between incest with a real sister and a 'clan' or 'classifi-

catory' sister. Love-magic has its mythological precedent in a tale of incest between a brother and sister (p. 84). Suicide seems to be fairly frequent; its two leading motives are the desire to confess a crime publicly and take the consequences and at the same time to rouse public sentiment against those who have driven him to this confession and thus caused his death (p. 97). The last chapters are devoted to the questions of mother-right and father-right and had better be discussed in connection with the author's views on sex and repression. Although, as observed at the outset, the book has its great merits in giving a vivid and life-like picture of certain aspects of savage life, it is certain that those who have read some of Dr Malinowski's other works will be rather disappointed by the perusal of this book. This is probably connected with the general standpoint of the author in connection with the aim of science. He regards science as something purely empiric, descriptive, and is quite satisfied if we are able to account for certain institutions on the basis of their present functions. All efforts to trace back customs to their historical antecedents are classified under the headline of "antiquarian interest" and rather looked down on from the lofty peaks of pure science. The author never once considers the possibility that institutions may have acquired other functions in the course of time and that when he thinks he has 'accounted' for them on the basis of an accurate description of their rôle in native society he is probably only giving the aspect of the institution that is predominant in the minds of the natives as he finds them. With Dr Rivers and many others we believe that true science must go beyond a mere classification of facts and attempt to answer the question 'why' besides the question 'how.' Now the causes for things as they are, whether in the life of the community or the individual, always lie in things as they were. It is surprising that the author who in other papers shows that he is ready to profit by the results of psycho-analytic experience should not have accepted the genetic view-point of modern psychology.

Psycho-analysts will certainly protest against the dictum of the author that "you cannot be *spontaneously* pushed forwards and pulled back at the same time" (p. 81). Indeed, there is nothing established with greater certainty in the realm of science than the fundamental *ambivalence* underlying all our psychic life; in other words that we are continually being "pushed forwards and backwards" at the same time in the Unconscious.

We feel that a book dealing with the legal aspects of social life would have gained immensely by examining the questions of repression, of the relation of the ego to the ego-ideal, of primitive narcissism and object love as forces moulding social behaviour. Then, for instance, many customs recorded in this book, such as the food-ceremonies, gifts, etc. might have been accounted for by comparing the behaviour of the Trobriand Islanders with what we know about *oral* character-development among Europeans¹. The cases of suicide clearly show the mechanism known to clinical analysis as "turning round upon the subject." The author concludes his book by observing that "it is high time that the student of Man should be able to say, *hypotheses non fingo*." We should think however that such a time would mean the bankruptcy of the true scientific spirit, for the dictum either means that we know everything, or, as that is impossible, it must mean that we do not desire to penetrate any further into the Unknown.

G. ROHEIM.

¹ Cf. the reviewer's "Völkerpsychologie und die Psychologie der Völker," *Imago*, XII, 273.

The Problem Child in School. By MARY B. SAYLES and HOWARD W. NUDD.

Three Problem Children. MARY B. SAYLES.

The Visiting Teacher Movement. By J. J. OPPENHEIMER.

The Visiting Teacher in Rochester. By MABEL BROWN ELLIS.

A number of pamphlets on the above and allied subjects. All published at New York, by the Joint Committee on Methods of Preventing Delinquency.

The subject of crime, or of delinquency, to use a less question-begging term, is of perennial interest. New and old theories as to the causation of delinquency are constantly being advanced. All these theories overlook the fact that there is seldom, if ever, a single causative factor. The roots of delinquency extend into many departments of life. And as regards the correct treatment of delinquency we are offered quite as many panaceas. All these disregard the fact that the offender is the most variable, and not the constant element in the problem.

In connection with physical disease it has long been recognized that success lies in prevention rather than in cure. Modern students of criminology comprehend that this principle holds equally true as regards delinquency. And there are some signs that they are beginning to impress this idea into the minds of the public, and of the authorities directly concerned. In this country, however, we still have a long road to travel.

Two things have become clear. Firstly, the problem of delinquency is a personal one, and is only to be solved by the intensive investigation of the individual offender, whether actual or potential. Secondly, the roots of delinquency can almost always be traced back to early life. It is established that the vast majority of our habitual offenders commence their anti-social career in childhood. This is evident, even as regards their first appearance in court. And it is well known to all workers in this field that such a first appearance by no means implies that it is the occasion of the first offence. As a consequence, it follows that the true path lies in the investigation not merely of the first offender, but of the difficult, the 'problem' child.

When we deal with such a child, we find that the causative factors of his anti-social conduct are of infinite variety. It is likely that every practising psychologist has been consulted by distracted parents, on account of delinquent trends in their offspring, and knows that carefully chosen remedial measures may often be of the greatest avail. These measures may involve the investigation and the adjustment of many factors, and may be of a prolonged and expensive character. This tends to confine such procedure to the comparatively wealthy. The present, and pressing, problem is to place the resources of modern science at the service of the majority of the nation's children. This can be accomplished by the establishment of properly staffed child guidance clinics. The scope of such a clinic extends far beyond merely dealing with matters which may come within the purview of the criminal courts. The education, public health, hospital, lunacy, mental deficiency, probation, and prison authorities are all concerned. At present, all these are working with little, if any, attempt at coordination. Our task, and it is no easy one, is to link them together, and to persuade each authority to sacrifice the idea that it is alone concerned in what is erroneously assumed to be its peculiar sphere.

It is now generally recognized that the child who presents a problem in school, who is constantly in trouble with his teacher and companions, who

is guilty of small acts of dishonesty or of sex misconduct, is the potential psycho-neurotic or delinquent. The only method which can be adopted in the direction of dealing with such a child is to investigate the case early, and with understanding. In certain cities of the United States of America such investigations are carried out by the visiting teacher. She (it appears always to be a woman) acts as a kind of *liaison* officer between the home, the school, and other departments of the community life. It may be necessary for her to refer the case to the physician, the psychiatrist, or the psychologist. But in many instances the character aberration is due to causes which can be remedied without undue difficulty. The necessary qualifications for such an official are of no mean order. She must understand child psychology; she must understand her own psychology, in order to avoid reading her own conflicts into the case; she must possess sympathy and tact; above all else, she must know how to avoid making even a suggestion of blame. All who have had experience in such cases know how much may be done by quietly talking over his difficulties with the patient. The second book mentioned at the head of this review puts it admirably, when it describes the good effect produced upon one of the three children, when brought into contact with an adult "who didn't try to teach her anything or to correct her, who seemed to understand things when all the words wouldn't come, who somehow made the whole business of life seem a little less desperate and hopeless." Who among us would not have felt better, at some time in his life, for a talk with such a person? The problem is never the fault of the child alone. The home, the school, and all too often the teacher, may be concerned. Much admirable discussion of the aims and the work of these visiting teachers is provided in the literature with which we are now dealing.

Space fails us to deal, even briefly, with all the smaller pamphlets. But we must mention that on *Team-work in the Prevention of Crime* by Dr Ralph P. Truitt. He well says that, in order to prevent personality and behaviour difficulties, "the work should be started with children before they are misfits in colleges and industry, and before they are brought to court or located in prison." That sentence contains the essentials of the whole matter.

The far-sighted generosity of the Commonwealth Fund in endowing such research excites our admiration and provokes our jealousy. But the latter emotion is mitigated by the news that it is proposed, by the authority administering this fund, to finance a demonstration clinic for a period of work in this country. Details are lacking at present. But we gather that the scheme is being considered by a committee, on which the newer psychological methods do not lack exponents. The staffing of such a clinic is of moment. So also is its location. The original proposal was to establish it in London. There is much reason to prefer a large provincial city, with a more homogeneous population than that of the metropolis. But these are comparatively unimportant details. The essential thing is the establishment of such a clinic, which, if unhampered by preconceived opinions, however hoary, and if untrammelled by official interference, will show how much may be effected by patient, scientific investigation of the potential as well as the actual offender.

M. HAMBLIN SMITH.

Woman. By BERNHARD A. BAUER, M.D. (Vienna). Translated by E. S. JERDAN, LL.B. and NORMAN HAIRE, M.B., Ch.M. London: Jonathan Cape. 1927. pp. 413. Price 25s. net.

The sub-title of this volume describes it as a treatise on the anatomy, physiology, psychology, and sexual life of woman. It is a sufficiently comprehensive problem, for a book of this size.

We are warned that the book will only be sold to members of the medical and learned professions, or to adult students of psychology and sociology. The implied slur upon the learning of the medical profession is, doubtless, unintentional. We presume that the existence of the non-medical part of the audience is the reason for the insertion of a brief historical introduction, and for an equally brief description of the male and female generative organs. Certain interesting practices for the determination of sex are mentioned, and their psychological meaning might well have been discussed. But the field of symbolism has not been touched by the author. He merely asks "Was it chance" that the Sphinx was represented with the upper half of a female body?

There follows a description of the gradual growth and development of woman, from infancy onwards. This includes an account of pregnancy and parturition. The relief felt by the woman at the time of 'quickening' is noted, but no explanation is given of this phenomenon. There is much that is highly disputable in this part of the book. It is asserted that neither man nor woman feels any sexual impulse at the latter's menstrual time, and that sex connection at that period may be injurious to both parties. Such statements are far too sweeping. There is no evidence that intercourse at this time has any bad effect. There is, of course, a widespread aesthetic repulsion against the practice.

The psychological side of the book is uneven and unsatisfactory. The author accepts the view that "sex dominates life completely," and that "the whole of life hinges upon sex." But he almost entirely ignores the work of the psycho-analytic school. He states that the child has no sexual feelings, in the ordinary sense of that word. Yet, in other passages, he tells us that "children, even in their earliest years, are fully capable of sexual feeling," and speaks of primary sexuality as "inborn." His remarks upon masturbation are characterized by wisdom, and he recognizes the conflict which is set up by the sense of guilt on this matter. He avoids the common pitfall of treating the sex act as if it were purely a physical affair, fully appreciating the many, and important, psychical components. But his treatment of certain particulars is very scanty. Except for a few general remarks on contraceptive practices, there is no reference to *coitus interruptus*. It is amazing to find a gynaecologist omitting all reference to a practice so common, and so deleterious to both parties.

The book requires to be read with due attention to the difference between social conditions here and in Austria. Throughout the work, the author assumes that the vast majority of men have had pre-marital experience of full sex connection. All the available scientific evidence negatives such a view, so far as the English speaking races are concerned.

The problem of marriage is an extremely difficult one. Only those who have never considered its complications will complain that Dr Bauer does not succeed in solving our difficulties. He recognizes the many factors which enter into a successful marriage. He rightly condemns mercenary and

'common sense' marriages, as fruitful causes of unhappiness and infidelity. But the real difficulty seems to be that the demands which a man makes from his wife are not only varied, but differ at various periods of his life. No doubt the same considerations apply to the other partner in the marriage. Dr Bauer seems to advocate a system of 'free love,' not in the sense of promiscuity, but in that of terminable connections. The social difficulties involved in this proposal are insufficiently considered, and especially that of the welfare of the possible children of the union. There is a useful appendix on prostitution, a term which is taken in a somewhat wide sense.

Perhaps the most satisfactory part of the book is the manner in which the bi-sexuality of every individual is maintained. The bearings of this have not yet been fully elaborated. It accounts for much that is stigmatized as 'perversion.' On this latter subject, Dr Haire makes some pertinent remarks in his introduction.

Any book which tends to correct the ignorance upon sex questions which exists, even among members of the medical profession, is to be welcomed. With the exceptions which we have indicated, this book may be regarded as a fair summary of the present accepted knowledge on this subject. But the book has grave general faults. There is far too marked a tendency to personify nature. Such expressions as "nature's intention" are out of place in a scientific work. The author's personal complexes are far too evident. His diatribes against the Roman Catholic Church are ungracious. It is not that church alone which has been obscurantist in this matter. Finally, we may remark that he appears to have a poor opinion of woman. His sex bias constantly appears. But it may be that this is inevitable. It is probable that the perfect work on sex problems can never result from the labours of any one writer. Whether man or woman, his or her unavoidable sex bias will colour all his or her work. The perfect book on sex will be produced, if it ever is produced, by a man and a woman conjointly.

M. HAMBLIN SMITH.

Genius. Some Revaluations. By ARTHUR C. JACOBSON. New York: Greenberg, An Adelphi Publication. 1926. pp. 160.

In this volume Dr Jacobson puts forward a theory that creative genius is a quality of the secondary or 'unconscious' personality, not of the apparent ego, and that the main factors in its development are a morbid, diseased or degenerate heredity, and the influence of drugs, alcohol and tuberculosis. "The release of creative secondary personalities would seem to depend upon some sort of intoxication, with resulting paralysis of inhibitions."

He gives long lists of names of more or less distinguished people under these different headings (Grace Darling is classed among 'geniuses' suffering from tuberculosis) but very little evidence to support the assertions made.

Jane Austen and Shelley are two of the names cited by Dr Jacobson as instances of genius liberated by tuberculosis. In the case of the former, the cause of her death is quite unknown to medical science, and neither family records nor contemporary correspondence give any hint whatever of tubercular symptoms. With regard to Shelley, Trelawny precisely states that "Shelley came of a long-lived race, and, barring accidents, there was no reason why he should not have emulated his forefathers in attaining a ripe

age. He had no other complaint than occasional spasms, and these were probably caused by the excessive and almost unremitting strain on his mental powers, the solitude of his life, and his long fasts, which were not intentional, but proceeded from the abstraction and forgetfulness of himself and his wife. If food was near him, he ate it—if not, he fasted, and it was after long fasts that he suffered from spasms¹."

The instances of genius released by alcohol are chosen even more at random. It will surprise many to learn that Dickens, Thackeray, John Stuart Mill, Kingsley, and Dr Johnson (according to Boswell the most temperate of men, except with regard to tea), owed their powers to what the author calls "The ethylic inspiration," while Tennyson is put on the same list on the strength of his "Will Waterproof's Lyrical Monologue," in which the head waiter is bidden "Go fetch a pint of port!"

Before being able to join issue with Dr Jacobson it would seem necessary to decide what constitutes a 'genius,' what are the exact signs of tuberculosis, and how many drinks make a drunkard. It is regrettable that careless gossip—involving the names of many people now living—should be added to the ever-increasing number of pseudo-scientific works meant to appeal to an unscientific public.

Dr Jacobson writes in an enthusiastic, popular style, interspersed with colloquialisms. Perhaps the almost lyrical regretfulness of his allusions to alcohol, its powers of inspiration and its charms in social intercourse, is the natural result of citizenship in a country which has now been dry for some years—as Arctic explorers dream and speak longingly of luxurious viands and unstinted City Banquets.

M. E. BURKE.

¹ Trelawny, *Recollections of the last days of Shelley and Byron*.

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